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**THE IMPACT OF CALIFORNIA SENATE BILL 826 ON EMPLOYEE PERSPECTIVES
AND STOCK PERFORMANCE ON CALIFORNIA TECH FIRMS**

by

KIMBERLY KANESHINA

**SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF THE
DEGREE OF BACHELOR OF ARTS**

PROFESSOR JEFFREY LEWIS

PROFESSOR ROBERTO PEDACE

MAY 4, 2020

September 30, 2018:

“Yet another glass ceiling¹ is shattered, and women will finally have a seat at the table in corporate board rooms. Corporations will be more profitable. This is a giant step forward for women, our businesses and our economy”

- California Senator Hannah-Beth Jackson,
Scripps College Alumna '71

¹ A glass ceiling is "the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements" (Witt, 1995, para. 3).

ABSTRACT

On September 30, 2018, California Senate Bill 826 (CA SB 826) was passed. This Bill requires a quota for women to serve on California headquartered and public corporate boards. This study focuses on California tech firms, which I define as firms that are reliant on technology to create their main product or platform; but, are not aerospace or telecommunication firms. My thesis is a two-part analysis: exploring employees', who worked at companies that were impacted by this Bill, perspectives, as well as, discovering if there is a relationship between percentage of female directors and stock price performance. Most employees were familiar with the Bill and believed that their companies would comply with it. Yet, they did not believe the fine was an incentivizing factor and agreed that a Bill focusing on Chief Suites (C-Suites) could be more effective in increasing company gender-diversity (Interview Hypotheses 1, 3, 4). Additionally, there were no statistically significant relationships and weak correlations between female directors and stock prices. There were also no statistically significant relationships between percentage change of female directors and percentage change of stock prices (Empirical Analysis Hypotheses 1, 2, 3, 4; Dataset 2, 3, 4). Ultimately, my research implies that while California tech companies are likely to comply with the Bill, adding more women onto boards will not have an impact on market performance on California tech firms. This research gives insight into the results other states might have through implementing similar laws. It can also advise them to refine their legislation to align with international policies and recommend that they consider enacting a similar Bill focusing on C-Suite gender diversity.

Keywords: gender diversity, gender equity, women on boards, women in leadership, legislation, tech companies

ACKNOWLEDGEMENTS

In September of 2018, as I was scrolling through my Twitter feed, I stumbled upon reactions to California Senate Bill 826 being enacted. As I read my peers' and society's reactions, I grew curious about the topic. In March of 2019, I crossed paths with the Bill again. This time, I met directly with the author of the Bill, Senator Hannah-Beth Jackson (Scripps College Alumnae '71) at the Scripps College Laspa Center for Leadership Annual Summit. Once again, my interest in the topic grew as I heard Senator Jackson speak about the purpose of the Bill and the process of enacting it. I attended the Summit on a whim, but it seemed like I kept crossing paths with the Bill. Little did I know that I would be inspired to dedicate my senior year researching this topic. So, first, a thank you to Vicky Lu, my dear friend who encouraged me to attend this event.

Then, I would like to thank my academic support system who provided me with resources, support, and accommodations throughout this process. Thank you, Professor Junisbai, Professor Lewis, Professor Pedace, Professor Filson, Professor Keil, Registrar Kelly Hogencamp, and Librarian Mary Martin. To my cohort of friends, throughout the nation, who attempted to help me acquire a database and who have assisted me in a variety of ways, thank you. Next, I would not have been able to write this successfully without the peer edits and guidance from Safa Arshadullah, Jamie Haughton, and Erik Salgado. Lastly, to the Claremont Colleges alumni network—thank you for being interviewees in my study, helping me recruit more participants, and providing me with your own research on this topic.

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INTRODUCTION

Diversity in the workplace² is valued by employers and employees. In fact, it was one of the key workplace trends in 2018 and 2019. Companies with high diversity benefit from less bias in product and services, where male experiences are taken as the ‘norm.’ They also benefit as they have better ‘organizational governance and social responsibility’ and better ‘occupational well-being’ for men and women (Fine et al., 2020, p. 42, 43). While companies tend to value diversity, when they attempt to increase diversity in their workplace, they are faced with barriers. This could be because a part of the company tends to value a *lack of* diversity, as more diverse workplaces can be challenging to navigate.

Increasing diversity in the workplace requires companies to recognize the value of differences, combat discrimination, and promote inclusiveness (Green et al., 2019). Additionally, it requires employees to be supportive of change. Often times diversity can be equated with affirmative action, which are “positive steps taken to increase the representation of women and minorities in areas of employment, education, and culture from which they have been historically excluded” (Unknown, 2018). Yet, affirmative action has a history of racial assumptions leading people to believe that minorities were hired simply because they match a certain quota. This is supported by a 1995 poll conducted by USA Today, CNN, and Gallup. They found that 19% of surveyed black women to believe that their colleagues ‘privately questioned... [their] abilities or qualifications’ (Von Bergen et al., 2002, p. 242). With an increase of minorities in the workforce, white males can feel threatened. Ultimately, causing them to think that they will “lose out on hiring and promotions to less qualified workers,” and

² Diversity in the workplace while not limited to, is most commonly referred to as racial, ethnic, and gender diversity.

then receive the mythological effects of reverse discrimination³ (Von Bergen et al., 2002, p. 243).

These barriers prevent companies from diversifying their workplace and inhibit minority applicants to receive positions in organizations. The barriers ultimately exist to uphold the glass ceiling barrier, which is "the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements" (Witt, 1995, para. 3). This ceiling enables women and minorities to face more discrimination in the hiring process than men (Fernandez & Rubineau, 2019; Ignatova, 2019; Karimi et al., 2018; Gerdeman, 2017; Van Vianen & Willemssen, 1992). It is supported through powers of homophily and stereotyping.

Homophily suggests that people are more likely to connect with those similar in "characteristics like age, race, gender, and income and stereotyping" (Byrne, 2018, para. 1). Homophily acts as a barrier as companies attract others that are similar to them (Rivera, 2012). Stereotyping can also occur if companies have preconceived notions of a future employee, and therefore do not select them because of these notions (Gonzalez et al., 2019).

Since 2009, the number of women in the workforce has increased from 43.2% to 58.2% in 2018 (U.S. Census Bureau, 2010; U.S. Census Bureau, 2018). From 2008 to 2017, female directorships, or female directors, board chairs, and CEOs, has increased from 13% to 19% within S&P 1500 companies. Yet, this increase is not represented in companies' corporate boards, specifically. Between 2008 to 2017, the percentage of female directors increased from 8% to only 10% (Papadopoulos et al., 2018). In fact, if women continue to join corporate boards at the current rate, it could take more than 48 years to achieve full gender parity. Furthermore, if

³ Reverse discrimination is when people in majority groups believe that minorities will 'gain benefits at the expense of whites who apart from race, would have had a superior claim to enjoy them' (Newkirk, 2017, para. 6).

companies attempted to fill every open board seat with a woman director, gender parity would not be reached until 2024 (Bellstrom, 2016).

An Overview of California Senate Bill 826

According to Barrett (2019), “only 15.5% of California company board seats are held by women and 16.2% of board seats in the Russell 3000—a ‘capitalization-weighted stock market index,’—are held by women” (p.3; Unknown, 2019, para. 1). In addition, most California companies do not have two or more female directors (Barrett, 2019). This lack of representation led California Governor Jerry Brown and Senator Hannah-Beth Jackson (Scripps College Alumna ’71) to enact California Senate Bill 826 (CA SB 826) on September 30, 2018 (CA SB 826, 2018; Scripps College, 2018). CA SB 826 requires public and headquartered California companies to add more women on their corporate boards. The purpose of the Bill is to, “boost the California economy, improve opportunities for women in the workplace, and protect California taxpayers, shareholders, and retirees” (CA SB 826, Section 1, A).

Companies were given three years and three months to completely comply with the Bill’s requirements. Since its enactment, over 1.5 years have passed. During these months, the Secretary of State, Alex Padilla, posted two update reports on July 1, 2019 and March 1, 2020. These give insight to the changes that companies have made. Therefore, this thesis is written at an ideal time—at approximately at the half-way point before companies need to comply with the Bill and before violations will be further enforced, and after two update reports have been published.

LITERATURE REVIEW

Diversity in the Workplace

Companies that have high diversity also have higher company performance and higher revenue due to innovation (Lorenzo et al., 2018). This positive impact is reflected beyond revenue as diverse companies are more likely to “attract top talent, improve their customer orientation, employee satisfaction, and decision making” (Hunt et al., 2018, para. 16). Diversity is not only important to companies’ top line growth but is also significant to their employees. In fact, 67% of job seekers said a diverse workforce was important when considering job offers (Glassdoor, 2014). As diversity is becoming increasingly valued by employees, especially Millennial and Gen Z Generations, websites like *Great Place to Work* and *Diversity Inc.* have been created so prospective employees can measure an organization’s inclusivity (Smith & Turner, 2015).

Gender Diversity in the Workplace

As more women enter the workforce, increasing from 32.7%, in 1948, to 56.8%, in 2016, there has been a surge of research on the positive impacts of gender diversity on companies (DeWolf, 2017). This is best demonstrated through examples of McKinsey & Company’s *Women in the Workplace*, Credit Suisse’s *Gender 3000*, and Deloitte’s *Women in the Boardroom* reports. Through their research, they have found that most gender-diverse companies are 21% more likely to experience above-average profitability; therefore, outperforming their peers. They also are 27% more likely to have “superior value creation” (Hunt et al., 2018, p.1). Furthermore, organizations where women hold at least 30% of leadership roles are “1.4 times more likely to have sustained, profitable growth.” Their leaders are twice as likely to work together to create new solutions and opportunities, 1.5 times more likely to work cross functionally, and 1.7 times more likely to have strong leadership (Dishman, 2020, para. 2 and 3). An increase of women in

companies also leads to a better understanding of female consumers' desires and needs. After PepsiCo Inc. increased the percentage of women and ethnic minorities, throughout the company, "about 1% of the company's revenue growth came from products inspired by diversity efforts" (Bauer & Erdogan, 2015).

Better firm performance is clearly tied to diversity, so why are more not firms diversifying? Aubrey Blanche (2018), head of Diversity and Inclusion (D&I) at Atlassian,⁴ believes excuses for not increasing workplace diversity can be due to "diversity fatigue" (para. 1) This occurs when people do not see results yet feel that they are paying a high emotional price for advocacy, making it harder to stay committed to the goal. People are tired of talking about the issues and frustrated that it has not turned into impactful results, while being overwhelmed by the plethora of issues at hand. Diversity fatigue is demonstrated within Atlassian's survey. While 80% of companies surveyed in 2018 believed that D&I was important, only 45% (compared to 2017's 55%) stated that their company had a formal D&I program, 35% (compared to 2017's 42%) participated in a discussion about diversity in tech, and 19% (compared to 2017's 29%) participated in an employee resource group (ERG). It seems that companies' and employees' prioritizations of diversity are decreasing. Perhaps, this is because the participants no longer believed diversity was an employee issue, as they believed that individuals, national governments, and company/corporate initiatives play the largest role in improving D&I.

⁴ Atlassian is an "enterprise software multinational that develops products for software development, project management, and content management" They serve over 135,000 customers (Unknown, 2020, para. 1).

Barriers to Workplace Diversity

Homophily

Companies and employees might feel diversity fatigue because of the barriers they face when attempting to diversify. This is known as the glass ceiling, upheld through barriers of homophily and stereotyping. Homophily, when ‘birds of a feather flock together,’ suggests that people are more likely to connect with those similar in “characteristics like age, race, gender, and income” (Byrne, 2018, para. 1). Homophily is present throughout our society, not only in the workforce (Messias et al., 2017). Therefore, companies need to be conscientious of it when hiring candidates.

Rivera (2012) found that recruiters often look for candidates who are 1) a cultural fit to the firm and 2) cultural similarity to themselves. Finding a candidate who ‘fits’ the firm is illustrated by a participant who stated, “‘We want people who fit not only the way we do things, but who we are’” (p.1009). When asked why a recruiter did not select a candidate, he replied with, “‘He’s very gregarious... kind of a frat boy... I think he’s more of a [FIRM] person’” (p.1009-1010). These recruiters looked for candidates who held personalities most similar to those of the firm. Beyond interviews, recruiters also identified personality traits, which they believed matched the firm, through candidates’ interests and extracurriculars on their resumes.

Recruiters often use themselves to measure fit “because that’s all you have to go on” (p. 1010). In the interview process, they typically found extracurricular or professional similarities that they “can relate to or that [they] know something about” to start the conversation (p. 1010). Another tool approximately 80% of participants described using was the ‘airplane test’ (p. 1010). That is, would I want to be stuck in an airport with this candidate?

These negative effects of homophily can be examined through Karimi et al.'s (2018) research. They examined how information travels through social networks of different homophily and group sizes. Within homophilic networks, they discovered that information does not disseminate as easily compared to networks with high levels of homophily. Therefore, implying that minority groups might not get information about a new job opening, workplace changes, or other important information as quickly as the majority-homophilic groups. This is demonstrated as men tend to refer more than women. On top of this, men refer more men to companies than they refer women (Fernandez & Rubineau, 2019, p. 89).

Homophily upholds the glass ceiling as minority candidates learn about a job opening slower than their counterparts. Additionally, companies tend to choose candidates who are most similar to themselves or the firm. Perpetuating these processes of homophily constrains companies' attempts to diversify and opportunities for underrepresented groups to work at homogenous-composed companies.

Stereotyping

Stereotyping, having preconceived notions of a group or individual, can also occur in the hiring process. This happens when companies decide to not select an individual based on these preconceived ideas, as demonstrated through Gonzalez et al.'s (2019) research. In their experiment, one pair of candidates had the same resumes except for their sex and qualifications "(meeting standards or higher)" (p. 187). Whereas, the other pair of candidates "differed by sex and parenthood status (with or without children)" (p. 187). They found that "childless candidates received more callbacks than candidates with children" (p. 192). Furthermore, "men were called back more frequently than women" at a 10.9% callback rate compared to 7.7% (p. 192). Even within the sub-group of women who were not mothers, men were called back at a higher rate

(13.6% vs. 12.4%). They concluded that discrimination is “grounded in employers’ stereotypes about the potential lower productivity of female applicants” (p. 196). Through this research, it is apparent that women and candidates with children were stereotyped and not hired as frequently as men and candidates without children.

Perhaps men get called, or receive job offers, more frequently than women based on recruiters’ ideas of an ideal applicant. Van Vianen and Willemsen (1992) concluded that the ideal applicant had more masculine traits, such as, “confident,” “logical,” and “rational,” than feminine traits (p. 479). The rationality recruiters used when accepting and rejecting candidates was that applicants had differences in these traits. When female candidates made a feminine impression, their chances of being selected decreased. Whereas if a male candidate made a feminine or not as masculine impression, this did not affect his chances of receiving a job offer. A recent study from LinkedIn also shows how this has not changed 27 years later. On LinkedIn, recruiters are 13% less likely to look at a woman’s profile than a man’s, reducing the chances of women to be hired (Ignatova, 2019). Therefore, concluding that from companies preferring male traits, women can be discriminated against in the hiring process.

Gerdeman (2017) discovered that some candidates “whiten” their resumes to increase their chances of being hired. Whitening a resume consists of removing information that clearly points to the applicant's minority status such as removing race-centered student organizations, changing foreign names to sound more American, and adding Western interests. Through erasure of ethnic identity, researchers found that candidates are more than twice as likely to receive a call than their minority peers.

Each of these studies, from selecting men more commonly than women to choosing candidates who appear to be “whiter,” demonstrate how stereotyping acts as a barrier to

diversifying talent. These stereotypes play a role in companies' hiring less diverse candidates and upholds the glass ceiling, as well as, companies' homogeneous workplaces. The preference for similarity in candidates perpetuates a lack of minority representation, within organizations, which causes workplace representation to barely change.

In 2004, Fortune 100 companies were comprised of 71.2% of white male board of directors. Fourteen years later, in 2018, this number decreased to 62.2%, indicating that white women on boards has increased by only 5.4% over these fourteen years. On the other hand, female racial minority board members have only increased by 2.4%, from 3% to 5.4% (DeHaas et al., 2019). Despite the number of women in the workforce increasing by 15%,⁵ as well as, obtaining 10.5%⁶ more degrees, Corporate boards have remained to be filled with majority of white men (U.S. Census Bureau, 2010; U.S. Census Bureau, 2018; Duffin, 2020). In fact, if women continue to join corporate boards, at the current rate, it could take more than 48 years to achieve full gender parity (Bellstrom, 2016). To combat the barriers of homophily and stereotyping, which uphold the glass ceiling, legislation might be a structurally supported solution to increasing diversity within companies.

Gender Diversity Legislation

As companies recognize the importance of gender diversity, governments have as well. Across the globe, governments have intervened in the private sector by creating legislation to increase women on corporate boards. Corporate boards are “essential bodies for governance and management and their efficiency determines the company’s performance” (Caliyurt, 2016, p. 109). Their role is to “represent, formulate, and fulfill the interests and expectations of shareholders as owners of the company” (Aluchna & Aras, 2018, p.1). Yet, there is a lack of

⁵ from 43.2% to 58.2.% between 2009 to 2018 (U.S. Census Bureau, 2010; U.S. Census Bureau, 2018)

⁶ from 26.1% to 36.6% between 2004 to 2019 (Duffin, 2020)

women on corporate boards. In Western Europe, 32% of public companies' corporate boards are women. In the U.S., women occupy 18.7% of board seats. Lastly, in Asia women are 6% of boardrooms (Desvaux et al., 2017). Countries across the globe have created legislation to increase gender diversity on corporate boards. Corporate board legislation can be categorized into two sectors: 1) *voluntary quotas* (Netherlands, Spain, Austria, UK, Australia) and 2) *mandatory quotas* (Belgium, France, Germany, Italy, Norway, India, U.S.).

Quotas

Voluntary Quota

European countries: the Netherlands,⁷ Spain,⁸ Austria,⁹ and the United Kingdom (UK) implemented a voluntary quota approach. Within the UK, they invoked Financial Times Stock Exchange (FTSE) 350 companies to obtain a 33% gender diversity by 2020 (Goyal et al., 2017). It has led to positive results, as the percentage of women on boards has almost doubled to become 23.5% (Tkachenko & Pervukhina, 2018, p.152). Additionally, UK companies that obliged with the voluntary quota led to “more independence, a greater likelihood of higher and diverse qualifications, and diverse functional background among women” (Goyal et al., 2018, p.35).

According to Aluchna and Aras (2018), in 2010, the Australian Stock Exchange (ASX) Corporate Governance Council also introduced a voluntary quota, or a recommendation, which advised companies to set measurable objectives for achieving gender diversity and then disclose them in their corporate diversity policies. Unfortunately, this voluntary approach has been

⁷ In 2019, Netherlands proposed that executive boards and supervisory boards of large companies have 30% females (Aluchna & Aras, 2018; DutchNews, 2019).

⁸ In 2007, Spain proposed 40% of state-owned companies with 250 or more employees need to have 40% of non-executives and executives female by 2015 (Aluchna & Aras, 2018; Gabaldon, 2017).

⁹ In 2011, Austria proposed state-owned companies have a quota of 35% females on supervisory boards by 2018 (Aluchna & Aras, 2018; McGrath, n.d.).

unsuccessful. The ASX female board members increased by only 4% between 2004 to 2017; however, in 2018, Australia had the highest diversity in the nation at 18.2%.

Mandatory Quotas

There are mandatory quotas in the European Union: Belgium,¹⁰ France,¹¹ Germany,¹² Italy,¹³ Norway,¹⁴ as well as, India¹⁵ and the U.S. (Ford et al., 2012; Tkachenko & Pervukhina, 2018; CA SB 826, 2018). Within the European countries, Norway, Spain, Iceland, France, and the Netherlands focused on quotas for public limited companies. While Finland and Iceland had quotas for state-owned companies, both Belgium and Italy required *both* public limited and state-owned companies to implement quotas. These countries require state-owned, and or, listed companies to have 30 to 40% of women on their boards; however, Norway was the first company to initiate a woman on board quota.

According to Kenerson (n.d.), in 2003, the 1997 Norwegian Public Limited Liability Companies Act was amended to establish a quota requirement for gender diversity on the board of directors in public companies. Norway gave companies five years to comply with the Bill. By February of 2008 all companies had complied. Norway now has the highest rates of female board representation in the world, increasing from 6%, in 2002, to 40.5%.

¹⁰ In 2012, Belgium required state-owned and listed companies to have 33% of executives and non-executives, by 2017, and in-listed Small Medium Enterprises (SMEs) by 2019 (Aluchna & Aras, 2018; Meier, 2018).

¹¹ In 2011, France required 40% of non-executive directors in large listed and non-listed companies to be female by 2017 (Aluchna & Aras, 2018; Zillman, 2016).

¹² In 2015, Germany required roughly 110 of their largest listed companies to have 30% of the supervisory board females (Aluchna & Aras, 2018; Petroff, 2015).

¹³ In 2012, Italy required, by 2015, their listed companies and state-owned companies to be 33% females (Aluchna & Aras, 2018; Zampano, 2012).

¹⁴ In 2008, Norway required its listed companies to have at least 40% of their boards be women, or they would face dissolution (S.C., 2018).

¹⁵ India's Companies Act, enacted in 2013, requires all stock exchange listed companies to have at least one female on its board (Tkachenko & Pervukhina, 2018).

Within Aluchna and Aras' (2018) research they write that studies report either a "negative or nil impact of increased gender diversity in Norwegian boards on firm performance" (p.35). Other studies reported a decline in some financial parameters that implemented the law, while some reported a stock increase after 2005. Norwegian firms accumulated more capital, through raising debt or equity; but this can be attributed to the 2008 Financial Crisis, not the additional female boards.

Additionally, the number of board seats was not changed because of the quota. Instead, firms replaced the male directors with females. This did not decrease the average age of boards, as the young females usually replaced the young male directors. Norway's quota resulted in women board members having less CEO experience, being younger, more educated, and more likely to be employed as non-executive managers. The reform also did not have an impact on the operating costs or operating revenues. Additionally, firms that were affected by the quota had fewer layoffs (Aluchna & Aras, 2018).

International Legislation Results

According to Jourova (2019), in October of 2018, the European Union's largest publicly listed companies had 44% female board members. France had at least 40% of each gender at board level, while in Italy, Sweden, Finland, and Germany, 33% of board members were female. From 2010 to 2018, Italy and France have increased their female board members by more than 30%. Belgium and Germany have seen increases of 20%. The countries with "binding quotas"¹⁶ and "soft measures"¹⁷ have far outperformed those which take no action (p. 74). This is concluded as those with quotas have increased from 10% to 37.5%, while countries with soft

¹⁶ Belgium, Germany, France, Italy (Jourova, 2019, p. 74)

¹⁷ Denmark, Ireland, Spain, Luxembourg, Netherlands, Austria, Poland, Portugal, Slovenia, Finland, Sweden, United Kingdom (Jourova, 2019, p. 74).

measures have only increased from 12% to 25.6%. Then, countries with “no action”¹⁸ have only increased from 12.5% to 14.3% (p. 74). Along with increases in female board members, female board chairs and CEOs have also increased. In 2003, female board chairs were at 1.6% and in 2019 it increased to 6.7%. Additionally, female CEOs increased from 2.5% in 2013 to 6.5% in 2019, almost mirroring the change of female board chairs.

Impact of Women on Boards

Company’s Culture and Public Perception

Women on boards positively impacts the company *internally* by increasing firm knowledge, board attendance and female retention rates, and *externally*, to the public and investors through participating in charity and Corporate Social Responsibility. This is demonstrated by Adams and Ferreira (2009). They discovered through examining data between 1996 to 2003, from S&P 500, MidCap, and Small firms, that women have fewer attendance problems than male directors. Additionally, male directors have fewer attendance problems if the board is more gender diverse. Moreover, the more gender diverse boards are, the more likely other women are to join monitoring committees. Therefore, demonstrating to employees that the board is responsible and supportive of their female employees. These results are echoed in Bilimoria’s (2006) findings, as she concludes that women on boards have a positive relationship with high female retention rates.

Kim and Starks (2016) argued that women add missing knowledge to boards. They hypothesized, “women provide specific types of functional expertise missing from the incumbent corporate boards” (p. 268). This is concluded as they found that women are more likely to offer

¹⁸ All other European Union countries (Jourova, 2019, p. 74).

experience within “Risk Management, Human Resources, Sustainability, Corporate Governance, Regulatory/Legal/Compliance, or Political/Government” (p. 269). They believed with more women on boards, there is an increase in diverse, available knowledge; thus, improving the decision-making and quality of the board’s advice. Miller and Triana (2009) discovered similar results. They found that more gender diverse boards product higher quality decisions.

Using a sample of 185 *Fortune 500* firms, from 1991 to 1994, Williams (2003) observed a relationship between the percentage of women on boards and firm philanthropy, as board members help determine how companies allocate their funds for charity. He found that women engage in more charitable activities at an average of \$9.25M. Williams stated that the initial impression of these results might be that women are more inclined to donate since they are “less concerned about the economic needs of the firm than their male colleagues” (p. 8, 9). But he stated that this is an inaccurate perception. Donations can cultivate relationships with other firms and organizations; therefore, he hypothesized that perhaps this could positively impact future earnings.

These findings are echoed by Bear et al. (2010). They found a positive relationship between the number of women on boards and strength ratings, “positive actions toward diversity and community stakeholders” for Corporate Social Responsibility (CSR) (p. 208). Companies with high CSR typically have a positive reputation and can lead investors or customers to pay a premium for them, increase their abilities to attract new talent, and enhance employee satisfaction (Deloitte, 2016). This positive perception is also seen when companies increase women on their boards, they are perceived as ‘female-friendly employers,’ committing to both advancing men’s and women’s careers. This commitment can attract investors, the public, and female applicants (Sealy, 2008). Ultimately, women on boards can have positive effects, such as,

increasing firm knowledge, board attendance, female retention rates, charity donations, and better CSR.

Financial Impacts

Positive Effects

In contrast to the impacts on company culture and public perception from women on boards, the financial impacts from women on boards are divided into positive and negative effects. Barrett (2019) found that the top 50 companies with the highest revenues have “at least one female director and 23% of their board seats are held by women” (p. 4). This positive impact of women on boards is supported through research from Credit Suisse (2015) and MSCI (2016) which were cited in the Bill, as well as, Chen et al.’s (2019) research (CA SB 826). Together, these case studies provide a variety of statistics that support why more women should serve on boards.

While it can be argued that women on boards is not a direct causation for higher financial performance, as women can be appointed during times of company success, women are actually appointed to leadership during times of crisis. This is known as the Glass Cliff Effect. Utilizing the FTSE 100 Index, Ryan and Haslam (2005) discovered that in comparison to men, women are more often to be appointed as board members during a “general financial downturn and downturn in company performance” (p. 87).

Bruckmuller and Branscombe (2011) were inspired by Ryan and Haslam’s (2005) research, so they decided to conduct two similar experiments of their own. In experiment one, they asked college students to read two different newspaper articles, which both had different versions. The first article focused on the upcoming retirement of the CEO. In one article it was led by a woman, in another it was led by a man. The second article focused on the company’s

financial status. In one article it was growing, in the other it was laying off people and closing stores. When students were asked to choose between the two equally qualified candidates, 62% of students chose the male candidate when companies which were doing well and led by a man. In contrast, when the male-led company was doing poorly 69% of participants chose the female candidate. In their second experiment, students either read that a company was doing poorly or very successfully. Then they read descriptions of a female and male candidate and rated their strengths. Through this experiment, Bruckmuller and Branscombe found that 67% of participants chose the man to lead the successful company, whereas 63% believed the woman should take over in a crisis. These results aligned with Ryan and Haslam's (2005) findings that women tend to be selected to lead companies when companies are in crises.

Credit Suisse discovered that companies which had at least one-woman board member had a Return on Equity (ROE) of 12.2%, whereas those with no women on boards had a ROE of 10.1% (Dawson et al., 2015). ROE measures how effectively the company is using assets to generate profits (Hargrave, 2020). Cases of high ROE can indicate that companies with women on boards are using the assets more effectively than those with no women on boards. Credit Suisse also found that companies that had female board representation had 2.4 Price-To-Book Ratio (P/BV) compared to companies without women which were at 1.8. A P/BV reflects the market valuation of the company's equity relative to the book value. A lower P/BV indicates that the stock is undervalued; thus, indicating that female representation leads to better valuation (Hayes, 2020).

MSCI (2016) observed similar results. They analyzed U.S. companies between 2011 to 2016. They discovered that companies with three women on boards outperformed those in financials that had no women on their boards. In periods that began with three women directors,

firms experienced median gains of ROE of 10% and Earnings Per Share (EPS) of 37%. A high EPS tends to indicate that the company is more profitable, indicating that three female directors on boards leads to higher EPS (Chen, 2020). On the other hand, companies with no women on boards experienced only median changes of 1% in ROE and actually decreased by 8% in EPS. They hypothesized that this could have occurred because “more diverse groups make better decisions” and “gender-diverse companies are more effectively using available talent pools” (p. 6).

Furthermore, Chen et al. (2019) examined the relationship between overconfidence, identified as the choice to hold company stocks or options, and female board representation (for 516 firms between the financial crisis of 2007 to 2009). They discovered that female board representation “reduced the negative impact of the crisis on firm performance” (para. 10). Companies that had women on boards were less likely to adopt aggressive strategies. Those that did not have any women, on their boards, had a greater drop in performance.

Negative Effects

In contrast to these positive statistics, research from the past 20 years has found a negative relationship between percentage of women on boards and accounting financial performance measures, like Return on Assets (ROA), and Return on Equity, (ROE) and Tobin Q, as well as, market value (Post & Bryon, 2014; Pletzer et. al, 2015; Solal & Snellman, 2019; Chapple & Humphrey, 2014).

Post and Bryon (2014) discovered through combining the results of 140 studies on women on boards and financial performance, while firms with more female directors have higher accounting returns, they do not have stronger market performance. They believe the results suggest that the relationship between market performance and women on boards is “conditioned

by the context” (p. 33). Because men tend to have greater human capital than women, they interpret this to suggest that this influences the investors’ evaluations of future earnings.

Pletzer et al (2015) also looked at data from 20 studies on 3097 companies to conclude that females on corporate boards do not have a relationship with financial performance, measured as ROA, which indicates how efficient a company is using its assets to generate earnings, ROE, and Tobin’s Q, which shows whether a company is overvalued or undervalued (Hargrave, 2019; Hayes, 2019). In fact, it is “consistently small and non-significant” (p. 13). In comparison to Post and Bryon (2014), their meta-analysis included different study samples, supporting the conclusion that there is no relationship. Pletzer et al. argues that if female representation has no relationship with firm performance, “it seems reasonable to promote gender equality in board representation” (p. 33).

Similarly, Chapple and Humphrey (2014) found no evidence between diversity and firm performance. Yet, observed weak evidence that more than one woman on boards is associated with lower returns than firms with one woman on the board. They concluded this through examining all firms’ returns, book-to-market, and market value on the S&P/ASX 300, the 300 largest listed Australian companies, between January 2004 to September 2011. Despite running four differently weighted one-factor and four-factor models for “equally weighted,” “value weighted,”¹⁹ while adjusting for size, book-to-market, and momentum factors,²⁰ they arrived at these conclusions (p.718).

¹⁹ This term value-weighted comes from prior research “(Brammer et al. (2007))” that identified that some women might be more value-relevant in some industries than others (Chapple & Humphrey, 2014, p.714).

²⁰ “At the end of December of year $t - 1$, stocks are ranked on their prior 1-year return and classified as up or down, using the 30th and 70th percentile breakpoints. We use the same size classifications as before. UMD (momentum factors) are calculated as the average return of the up portfolios minus the average return of the down portfolios” (Chapple & Humphrey, 2014, p. 715).

Despite Post and Bryon (2014), Pletzer et al. (2015), and Chapple and Humphrey (2014) finding little to no difference in firm performance with women on boards. Solal and Snellman (2019) learned that firms that increase board diversity suffer in a decrease of market value. Through examining 1,889 firms' data, from 1998 to 2009, they found not only companies' market values went down when adding women on boards, but also found that when firms made clear commitments to diversity initiatives, there was a greater decline in firm value. They believed this is due to the investors' interpretations of these changes, or that the market believes firms are being pressured by "public pension funds" and are therefore "not motivated by a genuine preference for diversity" (p. 1283).

Researchers have hypothesized that this negative relationship between financial measures and women on boards is due to investors' perceiving that women will not increase future earnings like male directors will or the demand for female directors has allowed for women to select better performing firms (Post & Bryon, 2014; Farrell & Hersch, 2015). The Glass Cliff Effect, which is when women are appointed to leadership during times of crisis, is another reasoning behind this negative relationship (Ryan & Haslam, 2000). Lastly, Solal and Snellman (2019) hypothesized that firms releasing corporate information to deliberately impact stock prices could affect female appointments, since these tend to receive a high amount of press (Lee & James, 2007).

United States' Legislation

As of September of 2018, the United States has also been trying to enact bills to increase women on corporate boards. This can be seen within Illinois, New Jersey, Massachusetts, and Washington. Among companies with market capitalization greater than \$1B and companies that have at least two women on their boards, California ranks 37th (Kuhns et al., 2019). Yet,

California was the first to officially enact the Bill. California's Senate Bill 826 is different from Norway's. While Norway's intended to provide equal opportunities for both men and women, California's focuses on gender equality for women (Kenerson, n.d.).

An In-Depth Look at California Senate Bill 826

On February 28, 2019, Senator Hannah-Beth, who authored CA SB 826, spoke at Scripps College's Laspa Center for Leadership's Annual Summit Address (Scripps College, 2019). Here, she shared that Governor Brown decided to enact the Bill because a few days before he needed to sign it, Brett Kavanaugh had been appointed as Supreme Court Associate Justice (Tatum, 2018). Governor Brown disagreed with this choice (ABC7.com, 2018). According to Senator Hannah-Beth, Governor Brown came to the realization that by signing this bill, he could allow for more women to be in positions of power. So less 'tragedies' like appointing men, with sexual assault allegations, into positions of power, would not occur (ABC7.com, 2018, para. 1). In Brown's signing message (2018) he writes:

"There have been numerous objections to this bill and serious legal concerns have been raised. I don't minimize the potential flaws that indeed may prove fatal to its ultimate implementation. Nevertheless, recent events in Washington D.C.—and beyond—make it crystal clear that many are not getting the message... Given all the special privileges that corporations have enjoyed for so long, it's high time corporate boards include the people who constitute more than half the 'persons' in America" (p.1).

On September 30, 2018, California Senate Bill 826 was enacted (CA SB 826, 2018). According to the CA SB 826 Factsheet (2018), California Senators Jackson, Atkins and Leyva believed this bill was a "proactive approach to require more women directors on publicly held corporations in California." They justified enacting this legislation because California is the "5th largest economy in the world." Therefore, they believed California "sets an example for responsible business globally" (p. 1). This ensures that women, which "comprise over half of the population and make over 70% of purchasing decisions" are involved with "discussions and decisions that affect corporate culture, actions, and profitability" (McGreevy, 2018, para. 11)

They received support from a variety of organizations like the National Association of Women in Business, Alliance of Chief Executives, and the California Legislative Women's Caucus (Jackson et al., 2018, p. 1).

This Bill declares that by the end of 2019, public companies that are headquartered in California, or principal executive offices (as stated by their SEC 10-K forms) that are in California should have a minimum of one female director on their boards. These companies are required to comply with the strict quota rules by the end of 2021. The rule expands beyond requiring one female director. If a company has six directors or more, the company should have a minimum of three female directors. If there are five director positions, they should have a minimum of two directors. Lastly, if there are four or fewer directors, they should have a minimum of one female director (CA SB 826). The requirements for the number of women on boards are all the same as Norway's²¹ up until when there are nine board seats. In Norway's legislation, if the board has nine members, each sex shall be represented by four members. In addition, if there are more than nine members on the board, in Norway, each sex should be represented by 40% (Unknown, 2003, p.503).

Similar to Norway, which implemented a penalty system for companies that failed to adhere to the legislation threatening to dissolve companies if they failed to comply with the gender quota, California implemented a fine system (Kenerson, n.d., para. 6; CA SB 826, 2018). If these companies do not comply with the Bill, they can be fined for violations. The first violation is \$100,000, while a subsequent violation is \$300,000. The first deadline was on December 31, 2019. By this date, companies were required to add at least one female director.

²¹ For boards with 2-3 members, both sexes shall be represented. For boards with 4-5 members, each sex should be represented by at least 2 members. For boards with 6-8 members, each sex should be represented by 3 members.

The final deadline is December 31, 2021; by this time, companies add any remaining female board members to meet the requirements (CA SB 826, 2018).

When the Bill was initially enacted, 89% of California based companies needed to make changes to comply with the Bill. By the end of 2019, the 2019 deadline, 33% (217) of California companies needed to appoint one female (Kuhns et al., 2019). In July of 2019, the California Secretary of State, Alex Padilla, was required to report the list of companies that were in compliance. This list had 184 companies in compliance and 537 not in compliance (Padilla, 2019). This was not a drastic change from when the Bill was first enacted in January 2018, as 29% or 183 companies were in compliance. In 2018, California ranked 29th among states with female directors, at 17.4%, but by the end of last year, after changes were made, it was ranked 16th at 23% (Prang, 2020).

Based on 2019 projections, by 2021, 199 companies will need to appoint at least one female director (Kuhns et al., 2019). As of March 2020, companies outperformed Kuhns et al.'s projections as 282 companies, out of 330, reporting at least 1 female director, are now in compliance with the Bill, leaving only 48 companies not in compliance (Padilla, 2020).

Companies that have five director positions, should have a minimum of two directors. If there are four or fewer directors, they should have a minimum of one female director. At the time of enactment, only 11% met the 2021 requirements. Based on 2019 projections, by 2021, least 136 companies will need to appoint at least three female directors and 276 companies will need to appoint at least two female directors (Kuhns et al., 2019).

CA SB 826 Public Reactions

When Norway's bill was enacted in 2008, the Minister of Trade and Industry, Ansgar Gabrielsen, was highly in support of it. Although, the language he used, "fed up with the male

dominance in the Norwegian boardrooms" sparked controversy (Reinertsen, 2011, para. 1). This led to the *Verdens Gang*, Norway's most popular newspaper, to spin his words into, "The Minister of Trade and Industry is Sick and Tired of the Men's Club: Wants to Force Women into Boardrooms" (Aluchna & Aras, 2018, pg. 51). Californians' complaints about the Bill echoed Norway's.

From the start of its enactment, the Bill was immediately questioned. As written in the *Mercury News* (2018), Fox News commentator Tomi Lahren stated, "This is an absolute crock of crap. As a woman, I find this not only condescending but absolutely ridiculous" (para. 2). Venture capitalist and managing partner with Structure Capital, Jillian Manus, made the argument that by creating this restriction on companies, board positions would not be based on merit. He stated, "Women want to not just fill a slot but also add value" (para. 15). San Jose State University Associate Professor of Women, Gender, and Sexuality Studies, Tanya Saroj Bakhru, also believed this Bill was not approaching board diversity through proper means. She stated that it was not the 'right conversation.' Instead, she believed that the 'right conversation' should be formed around making sure that women are "from all different racial and class backgrounds and are experiencing equity in the workplace" (para. 21).

Others believed that the Bill could be legally questioned. Law Professor at Stanford's Rock Center for Corporate Governance, Joseph Grundfest, predicted that the law could be challenged due to the 1982 Supreme Court Ruling. This ruling created the precedent that a company is governed by the laws of the location in which it is *incorporated*, conflicting with the Bill, as California is trying to govern companies that are *headquartered* in California. Comstock wrote that if the Bill is changed, under these terms, it would apply to only 72 companies, instead of impacting 632 companies (Yoder, 2019).

Grundfest's prediction was correct. On August 9, 2019, Judicial Watch, a conservative non-partisan educational foundation, filed a lawsuit against the Bill. The President of Judicial Watch, Tom Fitton, believes the Bill was "brazenly unconstitutional," as it "employs express gender classifications" (Judicial Watch, 2019, para. 10). Then, in December of 2019, Creighton Meland, Jr. filed a lawsuit against the Bill. He is arguing that it is "sex-based discrimination" and goes against the Fourteenth Amendment²² (Symon, 2019, para. 7). With the Bill, he believes he is not granted the right to select a candidate. While there are negative reactions and lawsuits against the Bill, its status still remains as constitutional.

A Scholarly Approach to Understanding Board Quotas

To justify the reasoning behind creating a mandatory quota for women on corporate board, it can be broken down into socio-political²³ and managerial theory categories.²⁴ These approaches provide a model for understanding the politicians' perspectives of the Bill. Social-political theory is the belief that equal representation is a fundamental civil right. On the other hand, managerial theory stresses the importance of direct and measurable impacts within the organization, culture and leadership, and company's performance (Aluchna & Szapiro, 2018).

While the *theories* present a way to analyze people's beliefs for increasing women on boards, *approaches* reflect which theory is used when advocating for legislation. Tkachenko and Pervukhina (2018) identify two approaches which can be used as lenses to view the Bill: 1) instrumental approach, and 2) regulatory approach. The instrumental approach, which appeals to the managerial theory, considers gender diversity through a business lens like how gender

²² "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States" (Constitution of the United States, 1789).

²³ Socio-political theory also encapsulates social justice/non-discrimination theory and gender/feminist theory (Aluchna & Szapiro, 2018)

²⁴ Managerial theory encapsulates four theories: principal-agent, resource dependence and human capital, stakeholder, and diversity theories (Aluchna & Szapiro, 2018).

diversity legislation helps to maximize stock value for the owners (Aluchna & Szapiro, 2018).

This approach is seen throughout the Bill as it states the reasoning behind enacting the Bill is to increase the firm's financial performance (CA SB 826).

On the other hand, the regulatory approach, which appeals to the socio-political theory, considers gender diversity through a civil rights lens. It espouses the “moral obligation to the discriminated part of society—that is women” (Tkachenko & Pervukhina, 2018, p. 165). It is illustrated in the Bill through stating, “studies predict it will take up to 50 years to achieve gender parity” (CA SB 826, 2018, p.1). Therefore, inferring that this bill is necessary to achieve women workplace advancement

These approaches provide a model for understanding the politicians’ perspectives of the Bill. Governor Brown’s support for the Bill exemplifies the regulatory approach. As reported in the Los Angeles Times, he wrote, “it’s high time corporate boards include the people who constitute more than half the ‘persons’ in America” (McGreevy, 2018, para. 1). He implied that it is within women’s rights to be on corporate boards, rather than using financials to explain why he believes this Bill is important.

On the other hand, Senator Hannah-Beth Jackson, who was responsible for creating the Bill, employed an instrumental approach. She stated that a woman’s perspective is crucial for “discussions and decisions that affect corporate culture, actions, and profitability,” implying the close connection between gender-diverse leadership and business success (para. 11). Similar to the politicians, studies that show the impacts that companies gain from appointing women directors, take an instrumental approach (Adams & Ferreira, 2009; Kim & Starks, 2016; Williams, 2003; Bear et al., 2010; Barrett, 2019; DeHaas et al., 2015; Eastman et al., 2016; Chen et al., 2019). Using Tkachenko and Pervukhina’ (2018) regulatory and instrumental approaches,

we can create a framework to better interpret how people are persuading others that females on boards are positive.

My Research's Focus on California Tech Firms

While tech companies have been working to improve their gender diversity, gender parity is far from being achieved. While women make up 59% of the total workforce, only 30% of women are in tech companies even though 35.5% of Science, Technology, Engineering, and Math (STEM) major graduates with bachelor's degrees are female (Beheshti, 2019; Catalyst, 2019). While it is not perfect parity, as 50% of STEM majors are not female, steps should be taken to increase parity in these fields to encourage more women to become involved in STEM to prevent parity to ever being achieved. In fact, "once women enter the tech field, they are 45% more likely to leave than men" (Catalyst, 2019, para. 2). They most often leave the tech industry because of isolation, male-dominated work environments, and a lack of women role models. Lack of diversity is best demonstrated through GQ photoshopping two women into their CEO photo filled with fifteen men in June of 2019. Generally, when companies are how they are improving diversity, they will give responses like, "diversity takes time," "we want to hire the best candidates," "this is an industry wide problem," and "our next hire will be a woman" as a means to excuse their inaction (Molla, 2019).

Bay Area²⁵ companies have been struggling with company gender diversity. Beyond the low stats, this is best highlighted through examples of women feeling inferior to their male counterparts. There have been reported cases of women being asked to take notes in meetings, being asked to spend "intimate time" with their coworkers and having to change their demeanor

²⁵ The Bay Area consists of nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma (Wikipedia, 2020).

to navigate the predominantly unwelcome male space. In fact, women often leave these tech companies because of the “workplace conditions” and “feeling stalled in one’s career” (Mundy, 2017, para. 23). These narratives have been reported from women throughout Silicon Valley on elephantinthevalley.com (2017). Here, women report issues of “feedback & promotion, inclusion, unconscious biases, motherhood, and harassment and safety” (para. 1). 90% of participants “witnessed sexist behavior at company offsites and/or industry conferences,” 87% received “demeaning comments from male colleagues,” and 60% reported “unwanted sexual advances” (Unknown, 2015, para. 11, 14, 18). These narratives are best demonstrated through some of the biggest sexual assault and harassment cases at Tinder, Uber, and Google.

At Bumble, in 2014, Whitney Wolfe Herd, now founder of Bumble who was before VP of Marketing at Tinder, sued Tinder co-founders alleging that they had called her a “whore” and sent “a barrage of horrendously sexist, racist, and otherwise inappropriate comments, emails and text messages” (Bonos, 2018, para. 7). That same year, after the lawsuit was settled, Whitney Wolfe released a new dating platform, Bumble. Bumble strives to “advance gender equality — and putting an end to the misogyny that still plagues society” (Wolfe Herd, 2019, para 4). They do this through implementing features like only allowing women to message first on the app. They are also working to help pass a law against sending unsolicited nude images in Texas and automatically blur nude images sent on their platform, then giving users the option to see it (Wolfe Herd, 2019).

Then at Uber, in February of 2017, negative light was shed on Uber after a former employee blogged about her “very, very strange year” (Fowler, 2017, para. 1). In her post, she shared stories of her manager implying that he wanted to have sex with her at the first day on the job, not being promoted due to undocumented performance problems, and women employees not

receiving a team leather jacket because there was too few of them to justify spending that amount. During her time at Uber, the percentage of women quickly declined from 25% to less than 6%. Regardless of her continuous reports to HR, nothing was resolved.

More recently, at Google, in August of 2017, a male Google employee, James Damore, argued that women have inherent differences than men, which leads to their underrepresentation in tech (Conger, 2017). He stated that women are more extroverted than men, which is expressed as “gregariousness rather than assertiveness” (para. 19). Therefore, “this leads to women generally having a harder time negotiating salary, asking for raises, speaking up and leading” (para 19). He also claimed that another Big 5 Personality Trait, neuroticism, which is higher anxiety and lower stress tolerance, contributes to the “higher levels of anxiety women report and the lower number of women in high stress jobs” (para 19). After this posting, Google fired him. Google’s CEO, Sundar Pichai, stated that Damore’s post had “advanced harmful gender stereotypes in our workplace” (Nicas, 2018, para. 6).

These cases of sexual assault and harassment are well-known possibly because of the huge impact these companies have on the world. In fact, if the Bay Area itself were a country it would be ranked the 19th largest economy (Avalos, 2018). The number of women on corporate boards differs per region in California.²⁶ In the Bay Area, specifically, 17.6% of directors are female. Out of all California counties,²⁷ San Francisco has the highest prevalence of female directors at 21.2%. While San Francisco has the highest prevalence of female directors in

²⁶ In the Central Coast and the Valley, 14.9% are female. Lastly, Southern California has only 12.8% female directors. Moreover, Southern California has the highest percentage of boards with no female directors at 33%. The other regions of California, the Bay Area and Central California, have approximately the same percentage at 21% and 20% (Barrett, 2019).

²⁷ The lowest percentage of female directors is in Orange (12.4%) and San Diego (12.9%). These counties also have the highest percentages of boards with no female directors. San Diego is at 40.8% and Orange is at 31.8% (Barrett, 2019).

California, they also have the highest percentages of boards with zero female directors, ranked second to lowest at 18.8% with San Mateo ranking lowest at 17.9% (Barrett, 2019).

RESEARCH ROADMAP

After reading the canon of both literary and empirical analyses, I realized there was a missing gap in the research. While the research focused on gender diversity, as whole, research that I had come across, had not investigated the implications of industry-specific impacts. Therefore, my research will be based on understanding the implications of CA SB 826 on tech firms. Throughout my research, I have defined a tech firm as a company which is *reliant on technology to create their main product or platform; however, these companies are not aerospace or telecommunication firms*. In other words, without technology, their product or platform would be non-existent.

Specifically, within the literary research, I identified a missing gap. Through the analysis, the context of the Bill was created, and the importance of this Bill was exemplified, but the voices from the people at companies who were actually impacted by the Bill—company employees—was missing. Specifically, within the empirical analyses, I found a discrepancy amongst the research (Post & Bryon, 2014; Farrell & Hersch, 2015). While some research, specifically created by firms, like MSCI (2016) and Credit Suisse (2015), demonstrated the positive impacts of women on corporate boards, most economic journals discussed the little impact women had on firm financial performance.

In my thesis, I have taken both a qualitative-interview approach, conducting interviews to understand the Bay Area employees' perspectives of their relationships with boards and the actions their companies are taking to improve gender diversity, and an empirical approach, to discover if there is a relationship between California tech companies' stock price performance

and women on boards. Ultimately, utilizing both employees' insights and data, allows for my thesis to have more holistic findings.

My research will be broken down as follows: the interviews and empirical analysis section, will have an introduction, methods, and results section for both experiments; then, I will state my limitations of the research, as well as, a few next steps; lastly, in the conclusion section I will interweave my findings from both experiments and explain how this thesis brings to light what to observe in the near-future.

INTERVIEW ANALYSIS

Introduction

When the Bill was first enacted, there were a variety of opinions. While some questioned its constitutionality, others questioned the tokenism that could be perpetuated through it. That is, will woman still be valued in the board room or will others believe they were selected through a non-merit-based process (Sulek, 2018)? Therefore, in this study, I was curious to learn about the employees' perspectives of the Bill, their knowledge of it, and their experience with tokenism. Within my internship experience, I noticed that average-level (manager-level) employees often have strong relationships with their Associates, Managers, Directors, and Chiefs. Then, they interact with the Vice Presidents through high level strategy planning; however, rarely, do they interact with the Board. Therefore, I was also interested in learning about their relationship with their boards and how knowledgeable they were about board responsibilities.

Additionally, I wanted to understand if participants believed improving board diversity could impact their firms, as well as, if they believed their firms would comply with it. Lastly, tech firms have a large spotlight on them due to their influence on the world and economy, as well as, the recent controversial gender diversity events (Wolfe Herd, 2019; Fowler, 2017; Nicas,

2018). So, I was curious to learn if participants believed the fine was an incentivizing factor and if press plays an influence when their firm makes decisions. I used these curiosities to shape my hypotheses, as follows:

Hypothesis 1: Participants who work at companies, which are in compliance with the Bill, are more likely to be (more than 50%) aware of the Bill in comparison to those not in compliance. This is based on the assumption that companies are more likely to tell their employees that they are in compliance with the Bill, than those who are not in compliance. I presume that companies are more willing to tell their employees good news, rather than directly address their lack of diversity.

Hypothesis 2: Participants that are aware of their boards' appointment process will be more likely (over 50% will believe) to have, or state that employees have, strong relationships with board members. This is based on the assumption that there is a correlation between understanding the board's appointment process with the relationship level employees have with the board. I presumed that there would be more dialogue or transparency about the board selection process, which then translates into strong board-employee relations.

Hypothesis 3: Participants will be more likely (over 50% will believe) to believe that legislation surrounding C-Suites gender-quotas can impact the company diversity instead of board gender-quotas. I came to this hypothesis through reading Kuhns et al.'s (2019) work. They argue that a bill, which focuses on increasing women in C-Suites, could be more effective in impacting the company's gender diversity. Through the combination of this academic research, along with, my previous internship experience, I found that employees are more in contact with C-Suite members than board members. Therefore, I assumed that employees would believe C-Suite quotas could be more effective in impacting board-diversity.

Hypothesis 4. Participants will not likely (more than 50% will not believe) believe that the \$100,000 to \$300,000 fine for not complying with the Bill is an incentivizing factor. Because most tech companies pay an average salary of \$150,000, I assumed that this fine would not be an incentivizing factor (Thurm, 2019). I believe that the positive reputation could be a greater gain, rather than the fine. I believed it could cost more money to recruit, at an average of \$4,000, as well as, annually pay a new board member an average salary of \$43,500 (Zojceska, 2019; Tenenbaum, 2020).

Hypothesis 5: Participants will be less likely to (less than 50% will believe) believe their company prioritizes gender-diversity. Around 25% of women hold tech positions, whereas technical positions typically represent a majority of available positions in a company and are at the core of the company's existence (White, 2020). Due to the scandals of sexual harassment in tech and the lack of women representation in tech companies, I did not believe employees would believe that diversity is prioritized (Bonos, 2018; Fowler, 2017; Conger, 2017).

Participants

15 female interviewees participated in this research. I decided to only focus on interviewing females as I believed that they would be in more support and aware of the Bill, since this would be directly impacting their futures, as opposed to males. These participants worked at Bay Area companies ranging from 2K to 140K employees with annual 2018 revenue's ranging from \$600K to \$40B, with an average of \$14B. The 2019 total employee gender breakdown of 10 of these companies, excluding the 5 that do not report this data, averaged at 65% males and 37% females. Tech companies, gathered from 177 companies, average at 72% males and 28% females (Rangarajan, 2018). Additionally, the 2019 Board of Directors genders

averaged 8 males and 3 females. Out of the participants' companies, 47% of them were in compliance, with the Bill, while the others were not.

Participants worked in business and engineering departments²⁸ at their companies, worked at their company for 2 years,²⁹ and are approximately 31 years old. Additionally, a majority of participants are Claremont Colleges alumni. They were found by filtering on LinkedIn by company and school. They were recruited through engaging Facebook and LinkedIn posts, personal messages, and through connections.

Unlike other studies done on campus with other students, with the incentivizing factor of receiving cash or gift cards from participating, I did not offer these incentives to these employees. Because I was interviewing full time salary employees, I did not find it necessary to incentivize them with monetary things, as their thresholds for monetary incentivizing are likely higher than college students.

Methods

I believed qualitative interviews, instead of surveys, would be the best way to understand the employees. Through these interviews, I believed participants would be more likely to expand on their thoughts and feel less limited by the structure surveys provide. One interview was conducted at a cafe, while the rest (14) were conducted over the phone as a result of convenience. Interviews ranged from 30 minutes to 1 hour long. I asked interviewees a series of 15 questions that I divided into the following themes:

- Knowledge of the Bill
- Company's Board of Directors

²⁸ Only 6 participants allowed for this information to be shared.

²⁹ Only 4 participants allowed for this information to be shared.

- Opinions about the Bill
- Gender Diversity & Personal Experiences

Results

Knowledge of the Bill

40% (6) of participants had heard of the Bill. When asked about their opinions about the Bill were, generally, participants described it as “fair and effective.” They were glad to hear that the government was taking action. They believed structural change has significant power to create more equity on corporate boards. While all participants thought positively about the Bill, two participants voiced concerns. One participant was worried about the constitutionality of the Bill aligning with the same concerns that the Judicial Watch voiced (Judicial Watch, 2019). Another participant brought up her concern of women being perceived as an act of tokenism, which is the policy or practice of making only a symbolic effort, instead of making genuine efforts, rather than being in positions due to merit, which was aligned with Jillian Manus’s opinion (Sulek, 2018).

I hypothesized that participants who work at companies with more than two female directors will be more likely to be aware (more than 50%) aware of the Bill in comparison to those with two or less female directors (H1). This hypothesis was supported, as there were eight participants whose companies were in compliance with the Bill. Of these eight, five (62.5%) were aware of the Bill.

Out of the 40% (6) of participants who stated they had heard about the Bill before our interview, within these 6, only 20% (3) of participants stated that they had discussed the Bill at their workplace through an announcement in a leadership forum, in an internal group online forum, and with other coworkers. These participants stated that their workplace spoke positively

about it but did not provide many details. On the other hand, the remaining three participants who had heard about the Bill previously, stated that their workplace did not discuss the Bill.

When asked if discussing current events and politics was common in their workplace 53% (8) of participants stated that these topics were discussed with co-workers informally, but never in a group setting. One of these participants brought up that when discussing politics with coworkers, you have to be wary of who you discuss them with. Out of the three participants who stated they heard about the Bill and discussed it at their workplace, only two stated that they discussed politics at their workplace.

Company's Board of Directors

When asked if participants were aware of the process board members are elected in only 27% (4) stated they were aware. Only one participant, with five unsure and nine answering “no,” stated that there has been discussion about the Bill from the board level. In general, employees' likelihood of chatting about the board seemed unlikely with only 20% (3) of participants stating that this occurs.

I hypothesized that participants who are aware of their boards' appointment process will be more likely (over 50% will believe) to have, or state that employees have, strong relationships with board members (H2). However, this hypothesis was not proven when participants said they were unsure (2) of the average relationship, or it was “nonexistent,” (6), or minimal (7). Out of the participants (3) who believed the relationship was nonexistent, their responses were varied in what kind of role they believed their board played in decision making, varying from a large role to nonexistent to it being unknown. Additionally, how much of a role boards play in decision making varied per company. Out of those (7) who believed their relationship was minimal, three believed they had a minimal role in decision making, two thought they had a large role, and two

were unclear of the role. Through these responses, it can be inferred that most employees do not have a relationship with the board, and therefore, are not aware of their role and the impact they have on the company.

Opinions about the Bill

Increasing women within C-Suites leads to better economic returns, outperforming peers in profitability and risk management (Buellingen, 2018). Therefore, Kuhns et al. (2019) argues that a bill which focuses on increasing women in C-Suites could be more effective in impacting the company's gender diversity. So, I assumed that participants would be more likely to (over 50% will believe) to believe that legislation surrounding C-Suites gender-quotas can impact the company diversity instead of Board gender-quotas (H3). 80% (12) of participants agreed, proving my hypothesis correct. They stated that since employees more frequently interact with C-Suite Executives than the board they could have more influence and visibility in changing the company's gender diversity.

If companies do not comply with the Bill, they will be fined \$100,000 to \$300,000. I hypothesized that participants will not likely (50% or less) believe that the fine for not complying with the Bill is an incentivizing factor (H4). 40% (6) of participants believed that without the fine, rather, if the Bill was voluntary, their company would comply. Out of these participants, 66.7% (4) believed that the fine is not incentivizing. In contrast, 27% (4) believed that their company would not comply, while one participant omitted their answer and four others could not come to a conclusion. Out of these participants, 2 believed that the fine was not an incentivizing factor. The other two brought up that it depends on the size of the company, stating that smaller companies will be more likely to be impacted by the fine than large corporations. In 33% (5) participants believed that the press plays a role in decision making at their company.

47% of the participants' companies were in compliance with the Bill at the time of the interview. When asking those participants, whose companies do not comply, five believed that their company would comply, two believed that there was not a likelihood of the company complying, and one was unsure.

Gender Diversity & Personal Experiences

Participants voiced that gender diversity is prioritized at their companies through recruiting processes and attempts to retain female talent, as well as an emphasis on pay equity. I initially hypothesized that 50%, or less, of participants would believe their company prioritizes gender-diversity (H5). This was wrong, as all companies actually mentioned that their companies have Women Employee Resource Groups, or ERGs. Lastly, when asked if participants felt that they have ever felt tokenized by their current coworkers due to a part of their identity, all participants unanimously said they had not.

Discussion

Three, out of my five, hypotheses were supported (H1, H3, H4). I found that participants at companies who were in compliance with the Bill were more likely to know about the Bill, as 62.5% of participants' companies who were in compliance with the Bill knew about it (H1). Additionally, I learned that 80% of participants believed C-Suite quota legislation could be more effective in impacting gender-diversity, proving my hypothesis correct (H3). Lastly, I discovered that the fine was not an incentivizing factor for companies to comply with the Bill, as 66% of participants were in agreement (H4).

On the other hand, Hypotheses 2 and 3 were not proven. Hypothesis 2, the assumption that participants who are aware of their boards' appointment process are more likely to have strong relationships with board members, was nowhere close to being proven correctly. This is

due to the fact that most participants stated they had little to no relationship with the board. In contrast, Hypothesis 5, was proven incorrectly, as all participants believed that their companies were prioritizing gender-diversity.

EMPIRICAL ANALYSIS

Introduction

In this study, I hope to discover if there is a relationship between stock price performance and women on boards. The first two hypotheses focus on exact stock prices and percentage of women on boards, while the last two focus on percentage change (represented as % Δ). I wanted to include percentage change in my hypotheses, so I could better understand the change in values year-over-year. Additionally, I used dummy variables, two standard deviations above the average versus below to compare two sides, as opposed to expecting stock prices to correspond only with increases in percentage of women. My null hypotheses are as follows:

- **Hypothesis 1:** There is no statistically significant relationship between stock price performance and percentage of women on corporate boards. I arrived at this hypothesis through reading economic journals which also came to this conclusion (Post & Bryon, 2014; Pletzer et. al, 2015; Solal & Snellman, 2019; Chapple & Humphrey, 2014).
- **Hypothesis 2:** There is no statistically significant relationship between stock price performance and percentage of women two standard deviations above the average.
- **Hypothesis 3:** There is no statistically significant relationship between percent change of stock price return and percent change of women on corporate boards.
- **Hypothesis 4:** There is no statistically significant relationship between percent change of stock price return and percent change of women on corporate boards, grouped by dummy variables representing two standard deviations above the average versus below.

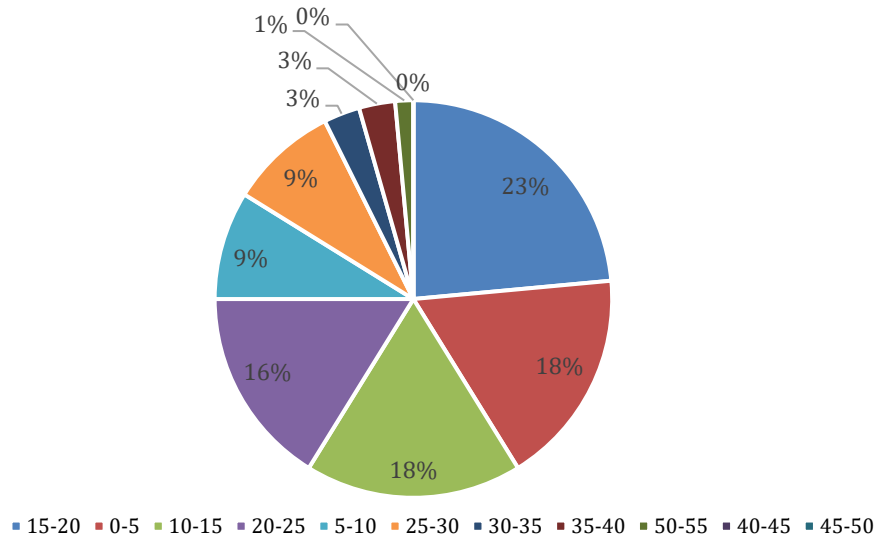
Methods

First, I used the North American Industry Classification System (NAICS) to narrow down the tech companies I wanted to look at. After looking through the whole NAICS list, I identified 24 codes, which would fall under technology. Then, I used the Hoover's Database to find companies, which were listed under these 24 industries, and compared these companies to the original Excel spreadsheet that was provided by the CA government. Once I received the list of companies, I went ahead and used Hoovers to find the stock ticker for each of these companies. After gathering that information, I imported the list of tickers into WRDS CRSP database, which then outputted the stock prices from 2009 to 2019 for these companies. I ended up with approximately 230 companies. After extracting the aerospace and telecommunication companies, focusing only on 12 codes, I was left with 67 companies (**Table 1 & Table 2**).

I collected Board of Directors information from SEC 10-K filings under the *Power of Attorney* and *Signatures* sections. Gender is not stated in the filings, so I had to assume gender based on the Director's names. If I was unfamiliar with the name, I Googled the Director and determined their gender through looking at photos of them. The Board of Directors signed the 10-K at different months, so in order to create consistency between the time period the Director served along with the stock price, I averaged stock prices over the 12 months for each of the ten years.

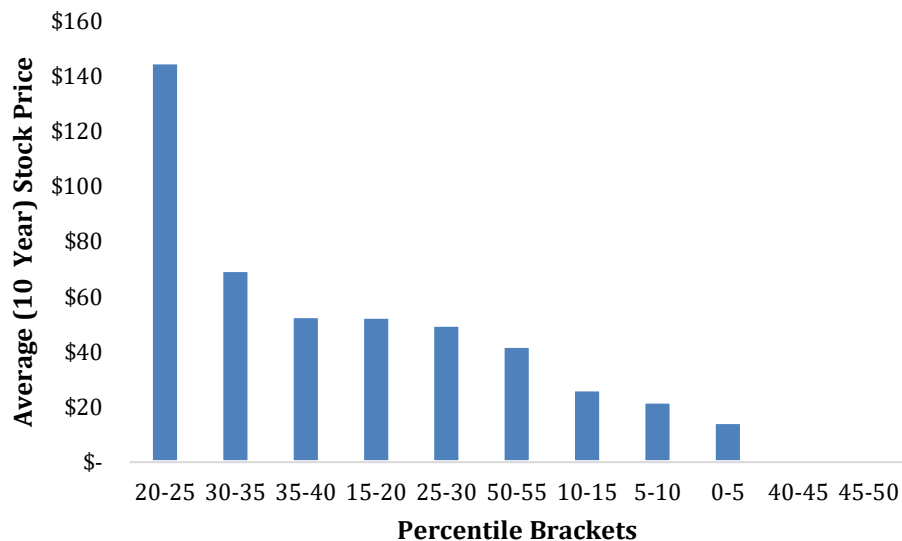
Grouping by percentile brackets and averaging percentage of female directors between years 2009 to 2019, the average percentage of female directors ranged from 0 to 55. The most often occurring average of female directors was in the 15-20% range, making up 23% of the dataset. That was followed by 0-5% and 10-15%, which both separately make up 18% of the dataset (Graph 1).

Graph 1. Average (10 Year) Percentage of Female Directors by Percentile Bracket



Next, the percentile bracket with the highest average stock returns, from 2009 to 2019, was 20-25%, averaging at \$144.96. The lowest percentile bracket was 0-5%, averaging at \$14.55 (Graph 2).

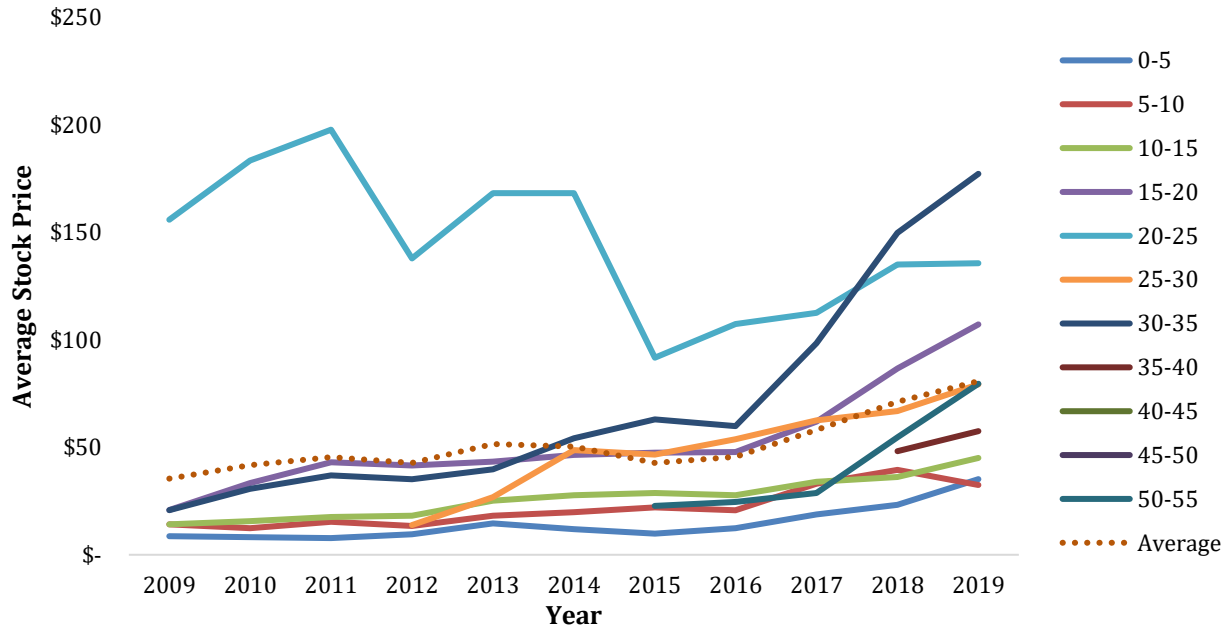
Graph 2. Average (10 Year) Stock Price by Percentile Bracket



Lastly, the year with the highest average stock prices was in 2019 (Graph 3). Through this graph it appears that a low percentage of female directors leads to the highest average stock prices, as

0-5% consistently remains above the other percentile brackets for eight years. This hypothesis will be tested in Regression 1.

Graph 3. Average Stock Price by Percentile Bracket from 2009 - 2019.



Model

My model analyzes the effect of women on boards on stock prices. Each regression includes the average stock prices for each year acting as the control variable. I ran four linear regressions to discover if there is a relationship between stock prices and percentage of women on boards. Each of the four regressions follow this format:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 X_{i2} + \beta_3 X_{i3} + \epsilon_i$$

Regression 1. Is there a relationship between stock prices, the percentage of female directors, and average industry stock prices per year?

$$Y_i = sp_0 + pwd_1 * x_i + aisp_2 * x_{i2} + \epsilon_i$$

Regression 2. Is there a relationship between stock prices, percentage of female directors two standard deviations above the average, and average industry stock prices per year?

$$Y_i = sp_0 + 2sdabove_1 * x_i + pcaisp_2 * x_{i2} + \epsilon_i$$

Regression 3. Is there a relationship between percentage change stock price, year over year, percentage change women, and percent change average industry stock price?

$$Y_i = pcsp_0 + pwd_1 * x_i + pcaisp_2 * x_{i2} + \epsilon_i$$

Regression 4. Is there a relationship between percentage change stock price, year over year, percentage change women above two standard deviations, and percent change average industry stock price?

$$Y_i = pcsp_0 + pc2sdabove_1 * x_i + pcaisp_2 * x_{i2} + \epsilon_i$$

Here, sp is defined as the stock price for each company, pwd is the percentage of women directors, asp is average stock price. Then, any variables that start with pc indicate that this is the percent change of the variables. $2sdabove$ is the binary variable set equal to 1 if the variable is two standard deviations above the mean of women directors and 0 if otherwise. $Pc2sdabove$ is the binary variable set equal to 1 if the variable is two standard deviations above the mean of percent change of women directors and 0 if otherwise.

From *Dataset 1. Descriptive Statistics*, we learn that *stock prices* average at \$55.22; however, this data is skewed by a high standard deviation of \$123.83 and the maximum stock price at \$1,195.81, which was Google's (GOOGL) stock price in 2019 (Dataset 5). The *average industry stock price*'s average is \$53.82, similar to the *stock price* variable's average; however, the *average industry stock price* has a lower standard deviation of \$14.09. The *percent change of stock prices* is at an average of 6.4%. Although, this is highly skewed by the standard deviation of 99.75%, which can most likely be attributed to its maximum, Turtle Beach Corporation (HEAR). It's percent change in stock price in 2017 was 1635% (Dataset 6).

The *percentage of women directors* averages at 13.18%, with the minimum being 0%. This is also the mode as it occurs 35% of the ten years (172 times). The maximum is 62.5%, which was Zendesk's (ZEN) percentage of women directors in 2018 (Dataset 7). Rarely is the percentage of women directors two standard deviations above the mean, as it occurs at an average of 2.86%. Then, the *percent change of women directors* is 0.22% with the minimum amount of percent change being -100%, which occurs 6% of the time (30 times). The maximum is at 300% which was VM Ware (VMW) in 2012 (Dataset 8). Similar to the percentage of women directors, the mode is 0, which occurs a total of 69% of the time (337 times). The high standard deviations throughout the data, relative to the means, indicates that there is a large range of variability between stock prices and percentage of female directors. In other words, companies stock prices and percentage of female directors are unique to each firm and not necessarily consistent throughout California tech companies.

Results

Regression 1: Stock Prices and % of Women Directors

In this regression, the only variable that was statistically significant was the *average industry stock prices* ($p = 0.031$). The *percentage of women* variable was not statistically significant ($p = 0.303$) nor highly correlational at an R value of 0.075 (Dataset 3). This weak relationship is echoed with the R^2 value of 0.015. Only 1.5% of the observed variation can be explained by the x-variables, *average industry stock prices* and *percentage of women*. While the variation can barely be explained by the x-variables, they do affect the stock price. Although, the effect can mainly be attributed to the average stock price effect, not the effect of percentage of women; therefore, the null hypothesis cannot be rejected (Dataset 2).

Regression 2: Stock Prices and % of Women Directors Two SD Above the Average

This regression echoed similar results as Regression 1, as the only statistically significant variable was the *average industry stock price* ($p = 0.013$). While the correlational value was higher than Regression 1, it still was low at an R value of 0.125 (Dataset 4). The *two standard deviations above* variable was not statistically significant ($p = 0.650$). With a R^2 value of 0.013, it indicates that the linear relationship is weak. Therefore, only 1.3% of the observed variation can be explained by the x-variables, *average industry stock prices* and *two standard deviations above*. While the variation can barely be explained by the x-variables, they effect the stock price. Although, like Regression 1, the effect can mainly be attributed to the *average stock price* effect, not the *two standard deviations above* (Dataset 2). Therefore, the null hypothesis cannot be rejected (Hypothesis 2).

Regression 3: % Δ in Stock Prices and % Δ of Women Directors

These next two regressions, Regression 3 and 4, focus on percent change, which are different from Regressions 1 and 2. Accounting for percentage change allows us to understand the differences between two years. Similar to Regressions 1 and 2, the only statistically significant variable was the change in *average industry stock price* ($p = 0$). With a R^2 value of 0.196, it indicates that the linear relationship is stronger than Regressions 1 and 2, as 19.6% of the observed variation can be explained by the x-variables, *average industry stock price* and *percent change of women directors*. While the x-variables effect the stock price, this is once again mainly attributed to the average industry stock price variable. Because not all p-values are significant, the null hypothesis cannot be rejected (Dataset 2, Hypothesis 3).

Regression 4: % Δ in Stock Prices and % Δ in Women Directors Two SD Above the Average

This regression is similar to Regression 3, as it measures the variables in percent changes. In this regression, the *average industry percent change stock price* was statistically significant (p

= 0). The *dummy above* variable was not significant ($p = 0.742$). Similar to the previous three regressions, I find that the x-variables effect the stock price because of the average industry percent change stock price. Not all p-values are significant, so we also cannot reject the null hypothesis (Dataset 2, Hypothesis 4).

Discussion

Ultimately because the *percentage of women* p-value was never statistically significant, the null hypotheses could not be rejected. Therefore, aligning with other research to indicate that there is no relationship with the percentage of female directors and stock prices (Post & Bryon, 2014; Pletzer et. al, 2015; Solal & Snellman, 2019; Chapple & Humphrey, 2014). While hypotheses results are similar to others, it leads me to wonder how the percentage of female directors on companies is often framed as positively impactful (CA SB 826). Perhaps this is because these studies focus on accounting measures of financial performance like ROE, ROA, P/BV, and EPS, whereas my study and other scholars focus on market performance (Dawson et al., 2015; Eastman et al., 2016). Whether or not these measures are correlated has been up for debate, as researchers are unsure if “they can be treated as an equivalent, interchangeable measures of firm financial performance” within management research (Gentry & Shen, 2010, p. 515). Through Gentry and Shen’s (2010) research, utilizing firms’ financials from 1961 to 2008, they discovered that there is a high correlation between accounting profitability and market performance; however, there is no evidence of convergence. In other words, there is no evidence that both of these measures provide the same conclusion. Therefore, this conclusion can provide reasoning as to why accounting measures of financial performance might support women on boards, while market measures do not.

LIMITATIONS & NEXT STEPS

In general, both of these studies focused only on tech companies; therefore, these results cannot be seamlessly extended into other industries.

Interview Analysis

The findings of this study are inherently limited based on participant pool's size and participants. The participant pool only includes 15 participants. Therefore, it cannot be assumed that these opinions are shared across all San Francisco tech companies; however, through their experiences we are able to get a glimpse on awareness and a sample of judgements on perceived effects and changes. Additionally, these interviews are not necessarily indicative of what is happening across California public tech companies, since these participants came from only Bay Area headquartered companies. Therefore, through a broader sample across a wider set of industries, there might be different results given the amount of recent press coverage on gender diversity within tech.

Lastly, the participants themselves are more likely to be knowledgeable, and in favor, of the Bill because a majority of the participants come from the 5Cs. This is due to 5C students and graduates being indoctrinated with the same progressive beliefs. Furthermore, because Scripps College is one of the Claremont Colleges, which places an emphasis on women rights, equity, and feminism, students are more conscious of women issues. Additionally, the Senator who enacted the Bill is a Scripps alumna; so, participants could have heard of the Bill through publicity about this.

While a majority of the participant pool are from the Claremont Colleges, or have been referred by someone at the Claremont Colleges, is a limitation, it can be indicative of the knowledge of California professionals. Because these participants are more likely to be aware of

this Bill and these issues, we can assume that these beliefs are representative of those at one side of the spectrum (strongly supporting feminist values of pro-choice, equal pay, and equal representation). Therefore, through learning that only 40% of participants were aware of the Bill, this is indicative that more discussion about the Bill needs to occur. So, companies can be influenced to change their boards.

Empirical Analysis

When collecting data, I had to manually label NAICS codes tech vs. not-tech based on my definition that tech firms are *reliant on technology to create their main product or platform; however, these companies are not aerospace or telecommunication firms*. Because I crafted this definition, these results are limited. If someone else interpreted tech companies to reflect other firms, my results could potentially not align with theirs. Additionally, because I focused labeling on NAICS codes as opposed to companies, some companies, which brand themselves as tech, were left out of the analysis. For example, Fitbit, a fitness technology hardware company, was not in this study because their NAICS code is 334519 or Other Measuring and Controlling Device Manufacturing, which did not fit into my definition of technology (NAICS, 2020).

To expand upon the research, I could have further researched differences in gender of the Chairman of the Boards and total board gender composition, as most people appoint candidates who are more similar than different to them (Rivera, 2012; Karimi et al., 2018). I could have also taken into account accounting measures of performance like Tobin's Q, Return on Assets, or Return on Equity to analyze if there was indication on direct revenue rather than the reaction of the stock market.

To receive better results, I could have also collected data that would allow me to control for specific company characteristics, such as, firm information. For example, I could have

controlled for number of employees, firm size, and number of competitors. I could have also run a multiple regression and taken into consideration the effects of firm employee information, such as, CEO tenure, CEO gender, critical mass,³⁰ percentage of employee stockholders, and board members' race, ethnicities, and ages (Bohren & Storm, 2010; Torchia et al., 2011). Through controlling for these characteristics and adding more variables to my regression, the relationship between stock prices and percentage of female managers could have been more clearly identified and supported.

CONCLUSION

In my research, I intended to fill the missing gap that was not present in literature surrounding women on boards, by including employees' perspectives, as well as, focusing on a specific industry, tech. Through my results, I have understood that employees at companies who were in compliance with the Bill were more likely to know about the Bill (Interview Hypothesis 1). Additionally, participants believed C-Suite quota legislation could be more effective in impacting gender-diversity (Interview Hypothesis 3). Lastly, I discovered that the fine was not an incentivizing factor for companies to comply with the Bill (Interview Hypothesis 4).

Through my empirical analysis, I learned women on boards and stock price returns were not statistically significant relationship and had weak correlations (Dataset 3, 4; Empirical Analysis Hypotheses 1, 2, 3, 4). Despite having no impact on market performance, as we discovered through conversations with employees, they believed that the Bill was "fair and effective." In fact, they believed that structural change has significant power to create more equity on corporate boards. These results were different than the public reactions that have been

³⁰ Torchia et. al (2011) analyzed the impact that 'minorities,' one, two, or three women, have on firm innovation. Critical mass theory suggests that the "nature of group interactions depends upon size," meaning that significant change takes place in group interactions (p. 302).

popularized through the media stating that the Bill may lead to women feeling tokenized and that it is unconstitutional (Judicial Watch, 2019; Symon, 2019; Sulek, 2018). In fact, none of these participants had experienced tokenism at their current workplaces.

While there is no statistically significant relationship between stock price performance and women on boards, powerful arguments still remain for diversifying boards. Researchers have found that women on boards impacts the company internally by increasing firm knowledge, board attendance and female retention rates, and externally, to the public and investors through participating in charity and Corporate Social Responsibility (Adams & Ferreira, 2009; Billimoria, 2006; Kim & Starks, 2016; Williams, 2003; Bear et al., 2010; Sealy, 2008). Beyond effects directly linked to firms, diversity is also important for attracting talent, as 67% of job seekers said a diverse workforce was important when considering job offers (Hunt et al., 2018; Glassdoor, 2014). Lastly, a lack of relationship between stock price performance and women on boards needs to be observed warily, as women experience the Glass Cliff Effect, or being appointed to leadership during times of crisis (Ryan & Haslam, 2005). Additionally, Solal and Snellman (2019) found that not only companies' market values decreased when adding women on boards, but also found that when firms made clear commitments to diversity initiatives, there was a greater decline in firm value. Therefore, the market is not necessarily "motivated by a genuine preference for diversity" (p. 1283).

Overall, this research sheds light on the possibilities for future studies. For example, it would be interesting to compare the relationship between a firm's accounting financial performance versus market performance indicators. One could also analyze companies over the period of a recession or bankruptcy to observe if there is a positive relationship between

percentage of women on boards and market performance to better understand the impacts of the Glass Cliff Effect.

The California Senate Bill 826 was passed in September 2018 and companies have until the end of December 2021 to comply with the Bill. Moving forward, within the next year, it will be fascinating to observe a myriad of reactions. How many companies will end up complying with the Bill? If companies do not comply with the Bill, will they receive negative press? Will the Bill be declared unconstitutional? What effects of adding more women on boards have on increasing parity within the workforce? Outside of the effects on California companies, will CA SB 826 and its results lead other companies, beyond Illinois, New Jersey, Massachusetts, and Washington, to enact similar legislature? Ultimately, I am curious to observe the impacts this Bill ends up having on companies state-wide and nationally. I feel fortunate to have been a part of extending the research on this contemporary topic by providing further insights and reasoning as to why more women need to be included in board-level corporate conversations.

TABLES

Table 1. Companies by Single Identifying North American Industry Classification System (NAICS)

NAICS ID	NAICS Name	Ticker	Company Name
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	ANET	ARISTA NETWORKS INC
		IMMR	IMMERSION CORP
		LOGI	LOGITECH INTERNATIONAL SA
		SCKT	SOCKET MOBILE INC
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	TTMI	TTM TECHNOLOGIES INC
334419	Other Electronic Component Manufacturing	GOOGL / GOOG	ALPHABET INC
		HEAR	TURTLE BEACH CORP
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	FLDM	FLUIDIGM CORP
		UCTT	ULTRA CLEAN HOLDINGS INC
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	ZNGA	ZYNGA INC
423710	Hardware Merchant Wholesalers	GPRO	GOPRO INC
511210	Software Publishers	ADBE	ADOBE INC / ADOBE SYSTEMS INC
		ADSK	AUTODESK INC
		APPF	APPFOLIO INC
		BVSN	BROADVISION INC
		CAMP	CALAMP CORP
		CRM	SALESFORCE COM INC
		CSOD	CORNERSTONE ONDEMAND INC
		DBX	DROPBOX INC
		DOCU	DOCUSIGN INC
		EA	ELECTRONIC ARTS INC
		FIVN	FIVE 9 INC

		INVE	IDENTIVE GROUP INC / IDETIVE INC / S C M MICROSYSTEMS INC
		MOBL	MOBILEIRON INC
		NLOK	NORTONLIFELOCK INC
		NVDA	NVIDIA CORP
		ORCL	ORACLE CORP
		PVTL	PIVOTAL SOFTWARE INC
		QADA	QAD INC
		QLYS	QUALYS INC
		SNAP	SNAP INC
		SPLK	SPLUNK INC
		SQ	SQUARE INC
		TWLO	TWILIO INC
		VEEV	VEEVA SYSTEMS INC
		WDAY	WORKDAY INC
		ZEN	ZENDESK INC
		ZUO	ZUORA INC
518210	Data Processing, Hosting, and Related Services	ISDR	ISSUER DIRECT CORP
		JNPR	JUNIPER NETWORKS INC
		LEAF/LFGR	LEAF GROUP LTD
		OOMA	OOMA INC
		VERI	VERITONE INC
519190	All Other Information Services	BOX	BOX INC
		GOOGL	ALPHABET INC / GOOGLE INC
		JCOM	J2 GLOBAL INC
		TWTR	TWITTER INC
		YELP	YELP INC
541511	Custom Computer Programming Services	CLDR	CADENCE DESIGN SYSTEMS INC
		CSLT	CLOUDERA INC

		FSCT	FORESCOUT TECHNOLOGIES INC
		OKTA	OKTA INC
541512	Computer Systems Design Services	AYX	ALTERYX INC
		EBAY	EBAY INC
		ESTC	ELASTIC N V
		FB	FACEBOOK INC
		LEAF	LEAF GROUP LTD
		NXGN	NEXTGEN HEALTHCARE INC
		PLAN	ANAPLAN INC
		SNX	SYNNEX CORP
		WATT	ENERGOUS CORP
541890	Other Services Related to Advertising	QUOT	QUOTIENT TECHNOLOGY INC

Table 2. Companies by Multiple Identifying NAICS

NAICS ID	NAICS Title	Ticker	Company Name
334118 + 541511	Computer Terminal and Other Computer Peripheral Equipment Manufacturing Data Processing, Hosting, and Related Services	FSCT	FORESCOUT TECHNOLOGIES INC
334118 + 518210	Computer Terminal and Other Computer Peripheral Equipment Manufacturing Data Processing, Hosting, and Related Services	JNPR	JUNIPER NETWORKS INC
334118 + 511210	Computer Terminal and Other Computer Peripheral Equipment Manufacturing Software Publishers	SQ	SQUARE INC
		INVE	IDETIVE INC
334614 + 423710	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing Hardware Merchant Wholesalers	ATVI	ACTIVISION BLIZZARD INC
334614 + 511210	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing Software Publishers	TIVO	TIVO INC
519190 + 511210	Software Publishers	BOX	BOX INC
541511 + 511210	Data Processing, Hosting, and Related Services Software Publishers	CDNS	CADENCE DESIGN SYSTEMS INC
		GLUU	GLU MOBILE INC
		PFPT	PROOFPOINT INC
541890 + 511210	Other Services Related to Advertising Software Publishers	COUP	COUPA SOFTWARE INC
541512 + 511210	Software Publishers	NOW	SERVICENOW INC
541511 + 541512	Data Processing, Hosting, and Related Services Computer Systems Design Services	VMW	VMWARE INC

Table 3. Variable Definitions

<i>sp</i>	stock price
<i>pwd</i>	percent of women directors
<i>aisp</i>	average stock price
<i>pcwd</i>	percent change of women directors
<i>pcsp</i>	percent change stock price
<i>pcaisp</i>	percent change average industry stock price
<i>2sdabove</i>	2 standard deviations above average percent of women
<i>pc2sdabove</i>	2 standard deviations above average percent change of women

Dataset 2. Results of Regression Analyses

Variables	Regression			
	1	2	3	4
Stock Price (Y)	1.130 (0.959)	1.791 (0.935)		
Average Industry Stock Price	0.887 (0.031)	0.985 (0.013)		
% of Women	48.399 (0.303)			
2 SD Above % Women Directors (Dummy Above)		15.243 (0.650)		
% Change Stock Price (Y)			0.114 (0.005)	0.116 (0.005)
Average Industry % Δ Stock Price			1.099 (0)	1.089 (0)
% Δ Women			-0.007 (0.952)	
2 SD Above % Δ Women Directors (Dummy Above % Δ)				-0.102 (0.742)

NOTE - Variables are x-variables, or independent variables, unless they are Stock Price and % Δ Stock Price, which are y-variables, or dependent variables as indicated by the **(Y)**. Coefficients are in the first columns and p-values are in parentheses. Bolded values in parentheses are statistically significant ($p < 0.05$).

Multiple R, R Square, Adjusted R Square, Standard Error, Observations, and F-values are as follows:

Regression 1: 0.123, 0.015, 0.011, 123.14, 490, 3.727.

Regression 2: 0.116, 0.013, 0.009, 123.25, 490, 3.293.

Regression 3: 0.442, 0.196, 0.192, 0.896, 490, 59.211.

Regression 4: 0.442, 0.196, 0.192, 0.896, 490, 59.277

CORRELATIONS

Dataset 3. Correlation for Regression #1

	<i>Stock Prices</i>	<i>Average Industry Stock Price</i>	<i>% of Women Directors</i>
Stock Prices	1		
Average Industry Stock Price	0.114	1	
% of Women Directors	0.075	0.266	1

Dataset 4. Correlation for Regression #2

	<i>% Δ Stock Prices</i>	<i>Average Industry % Δ Stock Price</i>	<i>% Δ Women Directors</i>
% Δ Stock Prices	1		
Average Industry % Δ Stock Price	0.442	1	
% Change Women	0.125	0.287	1

RAW DATA

Dataset 5. Companies by Stock Prices

Company Stock Ticker	Percentile Bucket	Stock Prices (\$)										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADBE	15-20	28.58	30.31	30.21	33.00	47.50	68.25	81.35	98.30	146.80	236.72	284.04
ADSK	30-35	20.77	30.63	36.90	35.10	39.72	54.28	54.92	62.27	102.81	132.17	160.54
ANET	30-35							71.24	75.69	163.81	256.21	251.09
APPF	10-15							15.76	16.42	34.90	58.77	93.44
ATVI	5-10				11.81	15.55	20.71	27.97	37.95	57.22	68.54	49.69
AYX	25-30									20.69	43.84	99.04
BOX	15-20							16.12	12.92	18.92	22.21	18.07
BVSN	0-5	13.85	12.07	11.36	15.86	9.15	9.47	5.98	5.93	3.68	2.13	1.78
CAMP	15-20	1.79	2.61	3.42	6.86	16.26	21.51	18.18	15.23	19.42	21.34	11.74
CDNS	10-15	5.58	7.01	10.10	12.02	13.94	16.85	19.99	24.08	36.17	42.98	65.50
CLDR	20-25									17.29	15.56	9.71
COUP	15-20						18.83	11.08	27.25	30.21	57.89	121.06
CRM	15-20	45.97	97.65	131.30	145.09	78.94	58.03	71.31	74.73	91.16	133.25	156.96
CSLT	10-15						14.15	6.53	3.98	3.82	3.23	2.40
CSOD	10-15			16.76	24.36	43.25	41.93	32.93	38.11	38.36	48.27	56.62
DBX	25-30										27.15	21.68
DOCU	35-40										48.23	57.56
EA	15-20	18.89	16.38	20.93	14.29	22.02	35.19	64.35	74.06	105.05	114.87	97.30
EBAY	15-20	18.66	24.43	31.47	43.22	53.22	54.02	42.76	27.14	35.19	35.30	37.46
ESTC	10-15											81.87
FB	25-30					36.75	69.91	88.75	118.89	158.87	168.28	184.60
FIVN	15-20						6.09	5.10	12.02	21.01	36.22	55.69
FLDM	5-10			14.70	14.91	22.11	33.72	23.62	7.99	5.26	6.83	8.75

FSCT	10-15									27.29	31.45	36.04
GLUU	15-20	0.91	1.44	3.82	4.13	2.90	4.48	4.81	2.43	2.96	5.89	7.51
GOOGL	20-25	####	525.35	573.14	647.00	895.72	867.92	625.91	763.77	945.94	1123.53	1195.81
GPRO	10-15							41.39	12.04	9.04	5.67	5.15
HEAR	5-10						7.15	2.20	1.16	0.78	13.58	10.96
IMMR	10-15	4.17	5.34	7.10	5.74	11.67	10.70	11.42	8.23	8.58	11.69	8.15
INVE	5-10		1.87	2.38	1.45	0.91	8.20	6.05	2.23	4.70	4.51	5.15
ISDR	0-5						9.98	6.51	4.95	11.71	12.98	9.42
JCOM	5-10	21.51	23.80	28.70	28.73	44.03	51.31	70.44	69.08	80.63	79.14	88.15
JNPR	10-15	22.33	29.17	29.90	18.98	19.76	23.94	26.53	24.59	27.87	27.04	25.66
LEAF	5-10					22.23	29.53	45.12	6.58	7.77	8.99	6.00
LOGI	20-25	14.49	16.43	12.37	8.65	8.28	14.14	14.46	19.26	33.97	40.00	40.17
MOBL	5-10						10.08	5.80	3.54	4.43	4.74	5.78
NLOK	20-25											25.21
NOW	15-20				30.67	43.39	61.15	77.49	71.67	107.84	175.32	259.97
NVDA	5-10	12.12	13.27	17.08	13.47	14.30	18.66	23.90	56.88	152.05	228.97	176.80
NXGN	5-10										16.89	17.30
OKTA	20-25									26.20	52.08	108.40
OOMA	20-25							8.03	7.84	10.03	13.42	12.88
ORCL	15-20	20.28	25.28	31.55	30.17	33.65	40.58	40.31	39.47	46.97	47.92	53.83
PFPT	15-20				13.61	24.16	38.48	61.06	65.39	84.75	106.98	118.09
PLAN	0-5										25.85	46.12
PVTL	25-30										20.58	16.66
QADA	10-15		9.10	10.53	13.19	13.69	20.19	23.87	22.08	32.59	47.33	44.93
QLYS	25-30				13.83	17.04	27.52	38.54	30.71	45.05	78.29	84.73
QUOT	20-25							6.43	11.22	12.25	13.25	9.59
SCKT	0-5	2.96	2.21	2.15	2.29	0.00	0.00	0.00	3.19	3.94	2.55	2.11
SNAP	15-20									17.05	11.34	13.33
SNX	10-15	24.62	27.58	30.74	35.18	48.49	66.69	81.05	100.03	121.73	98.80	103.99

SPLK	15-20				31.38	50.99	61.79	61.95	54.24	65.67	104.84	128.92
SQ	25-30							12.57	11.64	25.52	63.42	69.34
TIVO	0-5	8.97	10.26	9.83	10.30	12.35	12.77	9.87	13.11	18.47	12.76	8.46
TTMI	5-10	8.69	10.56	14.25	10.22	8.59	7.64	8.15	9.45	16.02	15.24	11.73
TWLO	30-35								41.71	28.87	61.22	120.44
TWTR	20-25					52.61	45.34	34.19	17.49	18.01	32.15	35.63
UCTT	20-25	3.46	8.65	8.19	6.19	7.16	9.80	6.51	6.85	20.90	15.13	14.98
VEEV	0-5					37.17	27.53	27.18	34.52	55.99	82.97	143.39
VERI	5-10									22.20	13.00	5.27
VMW	15-20	31.67	68.87	91.37	95.39	77.89	93.82	77.55	65.11	101.95	141.19	165.28
WATT	5-10						11.76	8.13	12.83	13.68	13.88	4.23
WDAY	15-20				51.03	68.62	87.81	80.14	76.89	97.22	135.99	186.72
YELP	20-25				22.01	42.93	69.84	35.97	29.91	37.77	41.72	35.04
ZEN	50-55							22.76	24.58	28.83	54.65	79.63
ZNGA	20-25				6.04	3.34	3.40	2.57	2.59	3.43	3.81	5.80
ZUO	10-15										22.38	17.21
Average Stock Prices		35.46	41.68	45.39	42.83	51.59	50.34	42.77	45.56	58.19	71.26	80.83

Dataset 6. Companies by Percentage Change (% Δ) Stock Prices

Company Stock Ticker	Percentile Bucket	Percent Change (% Δ) Stock Prices										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADBE	15-20	6%	0%	9%	44%	44%	19%	21%	49%	61%	20%	-100%
ADSK	30-35	47%	20%	-5%	13%	37%	1%	13%	65%	29%	21%	-100%
ANET	30-35								6%	116%	56%	-2%
APPF	10-15								4%	113%	68%	59%
ATVI	5-10				32%	33%	35%	36%	51%	20%	-28%	-100%
AYX	25-30										112%	126%
BOX	15-20								-20%	46%	17%	-19%
BVSN	0-5	-13%	-6%	40%	-42%	4%	-37%	-1%	-38%	-42%	-16%	-100%
CAMP	15-20	45%	31%	101%	137%	32%	-15%	-16%	28%	10%	-45%	-100%
CDNS	10-15	26%	44%	19%	16%	21%	19%	20%	50%	19%	52%	-100%
CLDR	20-25										-10%	-38%
COUP	15-20							-41%	146%	11%	92%	109%
CRM	15-20	112%	34%	10%	-46%	-26%	23%	5%	22%	46%	18%	-100%
CSLT	10-15							-54%	-39%	-4%	-15%	-26%
CSOD	10-15				45%	78%	-3%	-21%	16%	1%	26%	17%
DBX	25-30											-20%
DOCU	35-40											19%
EA	15-20	-13%	28%	-32%	54%	60%	83%	15%	42%	9%	-15%	-100%
EBAY	15-20	31%	29%	37%	23%	2%	-21%	-37%	30%	0%	6%	-100%
ESTC	10-15											
FB	25-30						90%	27%	34%	34%	6%	10%
FIVN	15-20							-16%	136%	75%	72%	54%

[illegible]

PVTL	25-30											-19%
QADA	10-15			16%	25%	4%	47%	18%	-8%	48%	45%	-5%
QLYS	25-30					23%	62%	40%	-20%	47%	74%	8%
QUOT	20-25								74%	9%	8%	-28%
SCKT	0-5	-25%	-3%	7%	-100%	0%	0%	0%	24%	-35%	-17%	-
SNAP	15-20										-34%	18%
SNX	10-15	12%	11%	14%	38%	38%	22%	23%	22%	-19%	5%	-
SPLK	15-20					63%	21%	0%	-12%	21%	60%	23%
SQ	25-30								-7%	119%	149%	9%
TIVO	0-5	14%	-4%	5%	20%	3%	-23%	33%	41%	-31%	-34%	-
TTMI	5-10	21%	35%	-28%	-16%	-11%	7%	16%	70%	-5%	-23%	100%
TWLO	30-35									-31%	112%	97%
TWTR	20-25						-14%	-25%	-49%	3%	79%	11%
UCTT	20-25	150%	-5%	-24%	16%	37%	-34%	5%	205%	-28%	-1%	-
VEEV	0-5					-26%	-1%	27%	62%	48%	73%	100%
VERI	5-10									-41%	-59%	-
VMW	15-20	117%	33%	4%	-18%	20%	-17%	-16%	57%	38%	17%	-
WATT	5-10						-31%	58%	7%	1%	-70%	100%
WDAY	15-20					34%	28%	-9%	-4%	26%	40%	37%
YELP	20-25					95%	63%	-48%	-17%	26%	10%	-16%
ZEN	50-55								8%	17%	90%	46%
ZNGA	20-25					-45%	2%	-24%	0%	33%	11%	52%
ZUO	10-15											-23%
Average % Δ of Stock Prices		32.89%	22.86%	3.85%	21.61%	46.07%	-2.77%	2.97%	39.73%	54.36%	9.67%	-100%

Dataset 7. Companies by Percentage (%) of Female Directors

Company Stock Ticker	Percentile Bucket	Dummy Above	Percentage (%) of Female Directors										
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADBE	15-20	0	14%	11%	0%	23%	23%	23%	23%	23%	20%	11%	18%
ADSK	30-35	1	13%	13%	13%	38%	38%	44%	44%	33%	40%	56%	56%
ANET	30-35	1							43%	29%	29%	29%	29%
APPF	10-15	0								14%	14%	14%	14%
ATVI	5-10	0	0%	0%	0%	0%	0%	13%	13%	11%	11%	20%	20%
AYX	25-30	0										25%	25%
BOX	15-20	0							20%	11%	11%	13%	33%
BVSN	0-5	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAMP	15-20	0	17%	17%	17%	17%	17%	33%	17%	17%	17%	17%	29%
CDNS	10-15	0	0%	0%	0%	13%	14%	14%	13%	13%	13%	25%	25%
CLDR	20-25	0										25%	22%
COUP	15-20	0									13%	17%	17%
CRM	15-20	0	10%	10%	10%	10%	10%	10%	18%	18%	25%	25%	23%
CSLT	10-15	0							17%	17%	13%	0%	11%
CSOD	10-15	0				0%	0%	0%	17%	14%	17%	11%	20%
DBX	25-30	0											25%
DOCU	35-40	0											36%
EA	15-20	0	20%	20%	18%	18%	0%	0%	11%	11%	20%	27%	22%
EBAY	15-20	0	9%	9%	9%	9%	10%	10%	15%	20%	18%	31%	33%
ESTC	10-15	0											14%
FB	25-30	0					14%	29%	25%	29%	29%	29%	25%
FIVN	15-20	0							13%	13%	14%	17%	17%
FLDM	5-10	0			0%	0%	0%	0%	0%	0%	0%	0%	14%
FSCT	10-15	0										11%	11%
GLUU	15-20	0	25%	25%	25%	14%	14%	14%	14%	11%	13%	22%	22%
GOOGL	20-25	0								27%	25%	25%	18%

GPRO	10-15	0							0%	0%	13%	22%	22%
HEAR	5-10	0		0%	0%	0%	0%	0%	17%	17%	0%	0%	0%
IMMR	10-15	0	25%	17%	17%	17%	0%	0%	0%	0%	14%	17%	17%
INVE	5-10	0	0%	0%	0%	0%	0%	0%	0%	25%	33%	0%	0%
ISDR	0-5	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
JCOM	5-10	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	13%
JNPR	10-15	0	17%	11%	10%	20%	20%	18%	20%	10%	10%	0%	0%
LEAF	5-10	0			0%	0%	0%	0%	0%	0%	11%	13%	22%
LOGI	20-25	0	20%	20%	20%	20%	22%	25%	22%	22%	22%	33%	27%
MOBL	5-10	0							0%	0%	0%	14%	20%
NLOK	20-25	0	10%	9%	9%	10%	13%	33%	33%	33%	33%	23%	18%
NOW	15-20	0					0%	0%	20%	22%	20%	22%	22%
NVDA	5-10	0	0%	0%	0%	0%	0%	10%	17%	17%	17%	0%	9%
NXGN	5-10	0	0%	0%	11%	11%	0%	0%	0%	0%	0%	11%	11%
OKTA	20-25	0										14%	25%
OOMA	20-25	0								13%	25%	29%	29%
ORCL	15-20	0	17%	17%	17%	17%	17%	17%	17%	17%	18%	23%	23%
PFPT	15-20	0					14%	29%	33%	17%	17%	25%	0%
PLAN	0-5	0											0%
PVTL	25-30	0											25%
QADA	10-15	0	0%	0%	0%	0%	0%	0%	20%	20%	20%	20%	33%
QLYS	25-30	1					14%	29%	29%	22%	22%	25%	43%
QUOT	20-25	0							25%	20%	17%	17%	22%
SCKT	0-5	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SNAP	15-20	0										11%	20%
SNX	10-15	0	0%	0%	13%	13%	9%	10%	10%	10%	10%	18%	18%
SPLK	15-20	0					0%	13%	20%	22%	22%	22%	20%
SQ	25-30	0								25%	25%	27%	30%
TIVO	0-5	0									0%	0%	0%
TTMI	5-10	0	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	20%

TWLO	30-35	1									29%	29%	43%
TWTR	20-25	0						13%	13%	13%	22%	38%	30%
UCTT	20-25	0	20%	20%	20%	20%	20%	20%	20%	33%	25%	25%	25%
VEEV	0-5	0						0%	0%	0%	0%	0%	0%
VERI	5-10	0										0%	13%
VMW	15-20	1	13%	13%	13%	13%	50%	11%	13%	0%	13%	13%	13%
WATT	5-10	0						0%	0%	0%	0%	0%	14%
WDAY	15-20	0					17%	17%	20%	17%	13%	13%	11%
YELP	20-25	0					11%	22%	22%	25%	25%	25%	25%
ZEN	50-55	1							57%	57%	57%	63%	56%
ZNGA	20-25	0				0%	13%	11%	25%	25%	30%	38%	38%
ZUO	10-15	0											14%
Average % of Female Directors			9%	8%	8%	9%	9%	11%	15%	15%	16%	18%	20%

Dataset 8. Companies by Percentage Change (% Δ) of Female Directors

Stock Prices	Dummy Above % Δ	Percentage Change (% Δ) of Female Directors										2019
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
ADBE	0	-22%	-100%	0%	0%	0%	0%	0%	-13%	-44%	64%	-100%
ADSK	0	0%	0%	200%	0%	19%	0%	-25%	20%	39%	0%	-100%
ANET	0							0%	0%	0%	0%	0%
APPF	0							0%	0%	0%	0%	0%
ATVI	0				0%	0%	0%	-11%	0%	80%	0%	-100%
AYX	0									0%	0%	0%
BOX	0							-44%	0%	13%	167%	0%
BVSN	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAMP	0	0%	0%	0%	0%	100%	-50%	0%	0%	0%	71%	-100%
CDNS	0	0%	0%	0%	14%	0%	-13%	0%	0%	100%	0%	-100%
CLDR	0									0%	-11%	0%
COUP	0						0%	0%	0%	33%	0%	0%
CRM	0	0%	0%	0%	0%	0%	82%	0%	38%	0%	-8%	-100%
CSLT	1						0%	0%	-25%	-100%	0%	0%
CSOD	0			0%	0%	0%	0%	-14%	17%	-33%	80%	0%
DBX	0										0%	0%
DOCU	0										0%	0%
EA	0	0%	-9%	0%	-100%	0%	0%	0%	80%	36%	-19%	-100%
EBAY	0	0%	0%	0%	10%	0%	54%	30%	-9%	69%	8%	-100%
ESTC	0											0%
FB	0					100%	-13%	14%	0%	0%	-13%	0%
FIVN	0						0%	0%	14%	17%	0%	0%
FLDM	0			0%	0%	0%	0%	0%	0%	0%	0%	0%
FSCT	0									0%	0%	0%
GLUU	0	0%	0%	-43%	0%	0%	0%	-22%	13%	78%	0%	-100%

GOOGL	0	0%	0%	0%	0%	0%	0%	0%	-8%	0%	-27%	0%
GPRO	0							0%	0%	78%	0%	0%
HEAR	0						0%	0%	-100%	0%	0%	0%
IMMR	0	-33%	0%	0%	-100%	0%	0%	0%	0%	17%	0%	-100%
INVE	0		0%	0%	0%	0%	0%	0%	33%	-100%	0%	0%
ISDR	0						0%	0%	0%	0%	0%	0%
JCOM	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	-100%
JNPR	0	-33%	-10%	100%	0%	-9%	10%	-50%	0%	-100%	0%	0%
LEAF	0					0%	0%	0%	0%	13%	78%	0%
LOGI	0	0%	0%	0%	11%	13%	-11%	0%	0%	50%	-18%	-100%
MOBL	0						0%	0%	0%	0%	40%	0%
NLOK	0											-100%
NOW	0				0%	0%	0%	11%	-10%	11%	0%	0%
NVDA	0	0%	0%	0%	0%	0%	67%	0%	0%	-100%	0%	0%
NXGN	0										0%	-100%
OKTA	0									0%	75%	0%
OOMA	0							0%	100%	14%	0%	0%
ORCL	0	0%	0%	0%	0%	0%	0%	0%	9%	27%	0%	-100%
PFPT	0				0%	100%	17%	-50%	0%	50%	-100%	0%
PLAN	0										0%	0%
PVTL	0										0%	0%
QADA	0		0%	0%	0%	0%	0%	0%	0%	0%	67%	-100%
QLYS	0				0%	100%	0%	-22%	0%	13%	71%	0%
QUOT	0							-20%	-17%	0%	33%	0%
SCKT	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SNAP	0									0%	80%	0%
SNX	0	0%	0%	0%	-27%	10%	0%	0%	0%	82%	0%	-100%
SPLK	0				0%	0%	60%	11%	0%	0%	-10%	0%
SQ	0							0%	0%	9%	10%	0%

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APPENDIX

Appendix 1. Interview Consent Form

Interview Consent Form

Project Title: Understanding CA SB 826's Impact

Principal Investigator: Kimi Kaneshina

Email: kimberlykaneshina@gmail.com

Introduction: I'll be conducting research about the effects of CA Senate Bill 826 on companies within the Valley. This Bill was passed in 2018 by a Scripps alumna, Senator Hannah Beth Jackson. It requires public and headquartered CA companies to incorporate a quota for women on corporate boards. You can read about the [Bill](#) here. Throughout my research, thus far, I've found that there's research supporting the Bill through an economical lens—how do more woman on corporate boards better impact the company's bottom line, stock price, etc. There's also research from a more academic approach—is women being more represented on corporate boards a civil right? Yet, there's a missing piece—what is it like for the people at these companies that are being impacted by the Bill? Is the Bill discussed in their respective workplaces? Are employees aware that decisions are made in, or against, compliance with the Bill? These are the questions I intend on answering through my interviews.

Qualifications: You are being asked to participate because you are over 18 years and work at a company which will be impacted by this Bill.

Description of study: To create a comprehensive thesis, I'll be doing a three-part analysis. I will analyze economic factors and their relationship with the Bill, provide case studies of other countries that have enacted similar bills, and interviews employees at companies, which will be impacted by the Bill.

Time/Description: I'll be doing an informational interview with you. I'll be asking a series of questions about your company's reaction to the Bill, your team's reaction to the Bill, your awareness of the Bill and how it's impacting your company, etc. It should take no longer than 30 minutes. I will be recording the interview and taking notes, so I can refer back to your statements when I'm coding the interviews.

Please sign here if you consent to your interview being recorded:

Signature of Research Participant

Printed Name

Date

Risks: In the Spring, my thesis will be uploaded to Scholarship@Claremont, the Claremont College's platform for research and theses. If you give information that is a confidentiality breach of corporate information, it could put you at risk of unemployment.

Benefits: None

Statement of participation: Participation is completely voluntary. If you feel uncomfortable or wish to not answer a question or stop the interview, at any time, please let me know.

Description of data: If consented above, audio will be recorded. Additionally, hand-written and typed notes will be taken during the interviews. This information will be stored in a password-protected folder.

Private information: I will be using the information below to code your interview and will collate the data. For example, after collecting through the data, I may perform a linear regression to understand if there's a relationship between awareness levels of the Bill and participants' genders. I also may use quotations to better support my findings. For example, if there was a positive correlation between awareness levels and gender, I could supplement that with a participants' statement who expressed that she only had these conversations with female coworkers.

Check below if you consent with this information to be used. If checked, fill out the information on the right.

<input type="checkbox"/> Company Name	_____
	Company Name
<input type="checkbox"/> Position at company	_____
	Position at company
<input type="checkbox"/> Years at company	_____
	Years at company
<input type="checkbox"/> Gender	_____
	Gender
<input type="checkbox"/> Age	_____
	Age
<input type="checkbox"/> Race/Ethnicity	_____
	Race/Ethnicity

Please sign here to confirm that you consent with the above checked, or unchecked, boxes.

_____	_____	_____
Signature of Research Participant	Printed Name	Date

Contact Information: If you have any questions about the thesis, you can contact my major advisor, Barbara Junisbai at: Barbara.junisbai@pitzer.edu. You can also contact the Scripps IRB faculty at: irb@scrippscollege.edu

By signing below, you are indicating that you comply with your answers being used for my thesis research.

_____	_____	_____
Signature of Research Participant	Printed Name	Date

_____	_____	_____
Signature of Researcher	Printed Name	Date

Appendix 2. Interview Questions

Knowledge of the Bill

1. Have you heard of CA Senate Bill 826?
 - a. Yes: What are your opinions about the Bill? Do u think it's fair?
 - b. No: CA SB 826 was passed in 2018. It requires companies that are headquartered and public within California to add women to their corporate boards. If there's 5 board members, 3 are required. If there's 4, 2 are required. And if there's 3, 1 is required. If companies don't comply with this Bill, they can be fined up to 300,000.
2. Have people at your workplace talked about the Bill? What are their general impressions of the Bill?
 - a. Yes: Is this (discussing current events and politics) common in your workplace culture?
 - b. No: Do employees at your company generally discuss current events and politics?

Company's Board of Directors

3. How many board members are on your board?
4. Do employees at your company talk about the board?
5. What's the relationship of an average employee with the board like?
6. How much of a role does your board play in decision making?
7. Are you aware of the process in which they're elected?
 - a. Yes: Would you mind giving me a high-level overview of it? Also how are employees promoted at your company?
 - b. No: In general, how are employees promoted at your company?
8. Has there been downward-level (from board to employees) discussion about this bill?

Opinions about the Bill

9. Do you think a bill that focuses on increasing women within C-suites would be more effective in impacting the company's diversity? Why/why not?
10. Do you think your company would comply with the Bill's quota if it wasn't mandatory but instead, voluntary? Why/why not?
11. Do you think the fine is an incentivizing factor in motivating these companies?
12. How much influence (1-10) (1 = least, 10 = most) does press play into decision making at your company?
13. What is the likelihood of your company complying with the Bill?

Gender Diversity & Personal Experiences

14. Your company currently has a gender breakdown of ___% men and ___% women. How is gender diversity prioritized at your company? Are there any women employee resource groups or women related initiatives?
15. Some people feel that the Bill can lead to perpetuating tokenism. Tokenism is the policy or practice of making only a symbolic effort, instead of making genuine efforts. Have you ever felt tokenized by other coworkers or your company because of your gender or another part of your identity?